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# PREFACE.

THE circumstances under which this little book is published may be very shortly stated. Soon after the Medical Society of Observation had been formed,* it was felt by the members that the labor of analyzing and comparing clinical observations would be greatly lightened, and the precision of the observations themselves increased, if the records of these were in every instance arranged on an uniform plan. The Society in consequence adopted, with some modifications, a form of arrangement of symptoms and after-death appearances, which had been framed by Dr. Walshe. The publication of this form seeming desirable, it was referred to a Committee, who expanded and altered various parts of it, and finally threw it into its present shape. The supervision of the whole was intrusted to Dr. Ballard, who has bestowed upon his task great labor and attention.

The Society believes that this scheme or method of arranging the clinical and anatomical phenomena of disease, will prove useful both to those who desire to learn systematically with what amount of detail, and in what order, those phenomena should be

* The members who took part in founding the Society were—Drs. Walshe, Jenner, Parkes, Beck, Hare, and Sieveking.

looked for, and also to those who wish to record with accuracy the results of their experience. It will probably be admitted, too, that errors in diagnosis are more frequently traceable to forgetfulness in searching for all possible evidences of disease, than to misinterpretation of those actually discovered: the physician proceeding to the investigation of an obscure case may, then, in a book of the present kind, occasionally find a useful remembrancer.

The Society is fully aware that many portions of their scheme are far from perfect; but it is hoped that the difficulties of the task, which have been considerable, may be received as sufficient excuse.

LONDON, *November*, 1852.

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# WHAT TO OBSERVE

## IN MEDICAL CASES.

## PART I.

### CLINICAL EXAMINATION OF A PATIENT.

§ I.

### § I.—The Personal Description and Peculiarities of the Patient in Health.

[Individual peculiarities form part of the healthy standard by which the morbid character of observed phenomena is tested.[1]]

*Physical peculiarities.*

*Physical description and peculiarities.*

1. *Race:*—country of birth. — Race.

2. *Sex:*—degree in which sexual characters are marked (general conformation, external sexual organs, mammæ, voice, beard, pubic hair, etc.). — Sex.

3. *Age*—real and apparent. — Age.

4. *Anatomical peculiarities*— — Anatomical peculiarities: height: width: form of trunk.

*Height;—width* from acromion to acromion.

*Form of trunk:* natural curves of spine, antero-posterior and lateral dorsal; apparent relative

[1] From particulars of this kind the "temperament" of an individual is determined.



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size and length of thorax and abdomen; patient high-shouldered or not?

measurements: of head. *Measurements:* of *head;* circular (over superciliary ridges and occipital protuberance), across vertex (from ear to ear), along middle line (from root of nose to occipital protuberance):—of *neck;* circumference opposite cricoid cartilage;—of *trunk;* circumference opposite ensiform cartilage, midway between nipples and clavicles, at margin of false ribs, at level of umbilicus.

of neck.

of trunk.

limbs. *Limbs:* well or ill formed? proportional and symmetrical or not?

weight. *Weight.*

muscular development. *Muscular development* (in trunk and limbs): its degree; proportional or not in upper and lower extremities? symmetrical or not on the two sides of body?

cellulo-fatty development. *Cellulo-fatty development:* its amount; uniform or affecting a particular locality?

skin. *Skin:* its color; apparent coarseness or fineness; visibility of subcutaneous veins.—Development of hair, on the head and elsewhere; its color; arrangement and mode of growth.

hair.

complexion. —Complexion.

countenance. *Countenance of patient:* its physiognomical expression.—Prominence of eyes; color and vascularity of conjunctivæ; color of irides, alike or not in the two eyes? various in different parts of the same iris; size of pupil.—Thickness of lips, etc.

eyes.

lips.

form of hands, etc. *Form of hands,* fingers and feet; conformation of nails; condition of skin on hands, etc.; connection of the above with habits and occupation of the individual.

5. *Physiological peculiarities*—.

Physiological peculiarities: skin.

*Skin:* its ordinary condition as to moisture and greasiness; readiness to sweat under exertion; proneness to sweat in certain localities, under what circumstances?—characters of *sweat* as to abundance, odor, acidity, etc.

sweat.

*Muscular strength* (measured by dynamometer): comparative strength of the two sides; power of enduring continued muscular exertion, whether of upper or lower extremities most remarkable?—Patient right or left-handed?

muscular strength.

*Digestive system:* natural amount of appetite; which is the principal meal?—is any kind of food naturally and habitually avoided, and why? is any followed constantly by symptoms of disease?—Natural degree of thirst.—Habitual condition of the bowels, frequency and character of the stools.

digestive system. appetite. thirst. state of bowels.

*Circulating system, etc.:* sensibility to changes of temperature or of hygrometric state of atmosphere; readiness of reaction after chilling the surface; habitual warmth or coldness of feet and hands; habitual character of the pulse as to frequency, fulness, force, and regularity;—tendency to blushing.

circulating system.

*Urinary system:* habits of voluntary retention of urine or of frequent micturition;—readiness with which diuresis is produced by mental affections.

urinary system.

*Generative system:* sexual peculiarities; natural force of instinct.—Catamenia (26).

generative system.

*Nervous system:* nervous excitability; habitual effect of mental influences on the pulse and respiration; habitual wakefulness or readiness to sleep; quickness or hebetude of senses.

nervous system.

*Intellectual and Moral peculiarities.*

### *Intellectual and Moral peculiarities.*[1]

Intellectual peculiarities.

6. *Intellectual peculiarities:* amount of education; readiness to learn; character of favorite studies or reading; habit of reading popular medical works.—Habits of business; power and habit of concentrating attention.—Readiness of conception.—Memory, generally or in respect of special subjects.—Reasoning powers and judgment; habitual character of association of ideas, philosophical, etiological, utilitarian, poetical, trivial, etc. —Power of imagination.—Power of language and expression.

Moral peculiarities.

7. *Moral peculiarities:* general behavior.—Disposition cheerful or melancholy; communicative, reserved or sulky; social or retiring?—Inquisitive or careless; closely observant or not of the state of the bodily functions and of variations in health? —Amount of ambition, its direction; vanity; self-love; love of applause; excess or deficiency of the above principles.—Natural boldness or timidity; fortitude.—General benevolence or malignity of disposition; readiness with which the passions are excited.—Force of domestic affections; of sexual love.—Force of sense of duty or of the moral sense; religious feeling; candor; integrity; veracity, or tendency to deceit and cunning.—Natural sympathy; tendency to imitation.—Prudence.—Tastes, etc.

[1] This subdivision has especial, but not sole, reference to cases of insanity; every man having his own standard of psychical health, by which presumed aberrations are to be judged.

## § II.—The Previous History of the Patient.

(Note from whom the particulars have been derived.)

### A.—HYGEIA.

§ II. A.

8. *Parentage:*—what child (first, second, third, etc.)?—Age of parents at birth of patient.—Any known peculiarity, physical, intellectual, or moral, in either parent at time of conception, or of birth. — Parentage.

9. *Infantile management:*—nursed by mother; by some other person: for what period?—brought up by hand, entirely or partially. — Infantile management.

10. *Place of birth or of former residence:*—length of time resident in each;—ever abroad, or in intertropical climates? — Place of birth or of former residence.

11. *Present residence:*—for what period? if in London or some other large town, how long resident there?—Dimensions of residence;—its ventilation, lighting, warming, etc.—its position, on high or low ground? its aspect.—Drainage; neighborhood of fens, standing or running water, sewers, cesspools, trees or buildings.—Exposure to noxious gases and vapors, animal, vegetable, or inorganic (from manufactories, etc.).—Number of occupants in house or apartment, by day and by night. — Present residence—duration. dimensions, etc. drainage, etc. malaria. number of occupants.

12. *Trade or occupation:*—age at which commenced.—Change of occupation at any time, and the reason of it.—Precise character of work; hygienic condition of work-room (11); habitual exposure to cold and wet.—Posture during work; — Occupation. character. posture during.

hours.
wages.

pressure made on any part of body.—Number of hours employed, by day and by night.—Weekly wages: number of persons dependent on individual; whether without work of late or at any other time?

Food—
quantity.
quality.
meals.
mastication.

13. *Food:*—quantity obtainable or habitually taken.—Quality; frequency of animal food, of salted food; vegetables taken in sufficient quantity or scantily.—Meals; their number, regularity; hours of meals; time given to each.—Mastication of food.

Drink—
quantity.
quality.
intoxicating drinks.
strong tea or coffee.

14. *Drink:*—quantity habitually taken.—Quality; water or alcoholic beverages.—Time of day when alcoholic drinks are taken; taken in place of food; before, with, or after meals.—Habit of tippling (liquor commonly used); habit and frequency of intoxication.—Habitual use of strong tea or coffee, cool or very hot?

Clothing and firing.
tight ligatures.
bedding.

15. *Clothing and firing:*—sufficient or not, by day and by night? use of flannel clothing; clothing of feet.—Habitual use of tight stays or neckcloths.—Sufficiency of bedding and bedclothes.

Cleanliness—
of person.
bedding.
habitation.

16. *Cleanliness:*—of person; habitual change of clothing; ablutions; habitual use of baths, and of what kind? of sea-bathing;—of bedding and bedclothes; their saturation with urine, discharges, etc.; purification of them; of habitation; flooring, walls; frequency of whitewashing; if a public institution, the use of water or dry rubbing in cleansing the wards? etc.

Exercise.

17. *Exercise:*—number of hours devoted to it; place; time of day; special character of exercise.

Sleep.

18. *Sleep:*—number of hours habitually taken; period of twenty-four hours in which taken; rest habitually broken or undisturbed?

19. *Study:*—number of hours habitually devoted to it; its special nature and object. — Study.

20. *Medicines* or other therapeutical agents habitually used (purgatives, issues, blisters, bloodletting, chloroform, etc.); ostensible reason for their use. — Medicines.

21. *Habitual use of narcotic drugs, etc.*—Opium, quantity used (stating whether the information is derived from the patient or from other sources); how long habituated to it?—Tobacco; mode of using it (by smoking, snuffing, or chewing); quantity used daily or weekly; habitually used before or after meals. — Narcotic drugs—opium. — tobacco.

22. *Peculiar habits.* — Peculiar habits.

23. *Venereal indulgences;* habitual frequency. —Masturbation (28). — Venereal indulgences.

## B.—PREVIOUS GENERAL HEALTH. — § II. B.

24. *Infantile health.*—Vaccination; age at which performed; its success.—Revaccination; age at which performed; its success;—character of cicatrices.—Variolous inoculation; age at which performed; severity or mildness of disease; number of pustules;—character of cicatrices.—Principal diseases from which patient has suffered (scalp diseases; sore eyes, ears, lips, nose; glandular swellings; tumid abdomen; worms; fits or convulsions; laryngismus stridulus; measles; scarlatina; smallpox; hooping-cough);—dates of occurrence, duration, severity, and sequelæ of each. —Dentition; period of commencement of first and second;—their connection in point of time with diseases of patient. — Infantile health—vaccination. — revaccination. — variolous inoculation. — diseases. — dentition.

Adult health: diseases.

25. *Adult health.*—Diseases from which patient has suffered (general loss of strength, color, spirits, etc.; local or general pains; fevers; inflammations; hemorrhages, from mouth, gums, nose, lungs, stomach, bowels, urinary or genital organs, skin, frequency and amount of them; colds; coughs; gastro-intestinal derangements; piles, etc.; rheumatism, acute or chronic, with or without probable cardiac complication as judged of by the employment of cupping, leeching, or blistering, over the region of the heart during treatment of one or more attacks; delirium tremens; special diseases arising from trade, *e. g.*, lead-colic; hysterical or other fits; menstrual derangements; venereal diseases, their sequelæ; ulcers, scars observable; hernia; accidental injuries, to great cavities, etc.); —precise period at which each occurred; its duration, severity, sequelæ, repetition. — Treatment adopted, especially venesection and salivation.— Previous attacks of disease similar to the present.

treatment.

previous attacks similar to the present.

## § II. C. C.—PREVIOUS SEXUAL CONDITION.

Catamenia—antecedents of first discharge.

26. *Catamenia.—Antecedents of first discharge:* social condition and habits;—increase of amusement, dancing, active work or idleness, novel reading, society of males;—improvement in diet, clothing, bedding, residence, etc.;—bodily or mental phenomena observed (propensity to solitude or other marked alteration in conduct, local pains, swelling of the breasts, leucorrhœa, vaginal pruritus, particular states of any bodily functions, etc.).

first discharge· date. character.

*First discharge:* precise age of patient; month, day of month; by night or by day;—character of discharge, its color, odor, consistence; accompanied

by coagula or not?—attended by pain or other suffering, hysteric paroxysm, etc.; followed by development of mammæ or limbs.—*Subsequent discharges;* regular or irregular from first; if irregular, when and from what cause?—exact periods of recurrence;—how commenced and attended, by sacral, femoral, mammary or hypogastric pains, cephalalgia, swelling of breasts, constipation, diarrhœa, hysteric paroxysm, etc.?—duration of discharge in days, variable or constant;—its quantity, variable or constant, proportional each day; its quality, color, odor, coagula;—circumstances which have influenced discharge, weather, residence in town or country, moral emotions, over-work or exercise, riding, dancing, childbearing, immersion of feet or hands in cold water, baths, venesection, medicines, enemata, etc.;—effect of catamenial discharges upon any particular function, upon temper, upon general bodily or mental activity.—*Health in intervals:* leucorrhœa preceding or following discharge, its duration, quantity, quality (249).—*Suspensions of catamenia:* times of their occurrence; period of discharge at which they occurred; their presumed cause;—influence exerted by them on the function subsequently, on the general health.—*Final cessation:* age of patient; change of social condition, etc. preceding or accompanying it; cessation sudden or gradual;—attended or not with general or local disturbance of any kind, by flushings, perspirations, indigestion, etc.?

accompaniments.

subsequent discharges: regularity.

accompaniments.

duration.

quantity.

quality.

circumstances affecting.

health in intervals.

suspensions.

cause of.

final cessation.

age.

accompaniments.

27. *Sexual intercourse, marriage:*—age at marriage, or first sexual intercourse; habitual frequency of intercourse.—Husband or wife living or not?—Subsequent marriages; their dates; age of patient when each was contracted.

Marriage.

Masturbation.

28. *Masturbation:*—habit, when contracted?

Pregnancies—accompaniments.

29. *Pregnancies:*—their number; duration; general character;—alteration in bodily functions or mental phenomena attending them; change of temper, spirits, etc.; constipation, diarrhœa, piles, etc.—Occurrence of menstruation during pregnancy, during every pregnancy or not? number of months during which it has recurred; duration of discharge, in days.

menstruation during.

Labors.

30. *Labors:*—their number; dates of each;—their character, natural, difficult, instrumental, complicated (with eclampsia, etc.);—important sequelæ, puerperal fever, phlegmasia dolens, mania, hemorrhage, etc.

Miscarriages.

31. *Miscarriages:*—their number; dates of occurrence; month of pregnancy at which they occurred (noting on whose authority, or on what evidence each illness is stated to be a miscarriage); their presumed causes; their sequelæ.

Children.

32. *Children:*—their number; period of time within which produced; their sex.

Lactation—

33. *Lactation:*—number of children nursed at a time; duration of each period of lactation; supply of milk.—Menstruation during lactation; its character, periodicity, duration, quantity, quality, etc. (26).

menstruation during.

## § II. D. D.—FAMILY HISTORY OF PATIENT.

Parents.

34. *Parents:*—living or dead? age at which either died;—their general state of health; diseases from which they were known to have suffered, mania, syphilis, gout, etc.; their habits, temperate or intemperate?—fatal diseases, phthisis, etc. (proof derived from some distinct symptoms).

35. *Uncles or aunts* (noting whether paternal or maternal): diseases to which they have been subject;—if dead, age at death and fatal diseases. Uncles or aunts.

36. *Brothers or sisters:*—number of each living; number of each dead (note whether these were born before or subsequently to patient, and whether during the same or some other marriage);—diseases from which they have suffered; ages at death; fatal diseases. Brothers or sisters.

37. *Children:*—number of each sex;—their health; any difference in the health of elder, younger, or of the two sexes;—children dead; ages at death; fatal diseases. Children.

38. *Nephews or nieces:*—their health;—if any have died, ages at death, and fatal diseases. Nephews or nieces.

39. *Family diseases and peculiarities:*—temperament; malformations; tendency to bleed on trifling injuries, etc. (sex presenting these peculiarities).—Fecundity of females.—Presumed family diseases; age at which any hereditary disease has appeared in any members of the family, epilepsy, insanity, phthisis, gout, etc.—General duration of life in family. Family diseases, etc.

## § III.—The Course of Existing Disease prior to the Patient coming under Observation.

Circumstances of seizure.

40. *Circumstances attending seizure:*—precise period of first invasion, day of the week or month, hour of the day or night; symptom or symptoms from which commencement of illness is dated.—Where patient was at the time, in bed, in the street, etc.?—How employed at the time?—Occurrence of seizure during a meal, after a meal; quantity and nature of meal; length of time intervening.

§ III. A.

### A.—PRODROMATA.

(Note intensity of supposed cause or causes of illness, the precise date of their application, their duration or repetition, and the exact period, in days or hours, between their application and the appearance of the first symptom of disease.)

Atmospheric states and changes.

41. *Atmospheric states and changes:*—temperature; barometric pressure; dew-point; weather; direction and force of wind; electrical state, etc.

Exposure to heat or cold.

42. *Exposures:*—to heat, in what way? insolation;—exposure to cold, in what way?—exposure to wet, in what way?—circumstances attending either of the above, and precautions subsequently taken;—use of cold baths or cold drinks when heated; alterations in clothing.

43. *Exposure to atmospheric impurities:*—confinement to close rooms and impure air;—respiration of deleterious gases (chlorine, carbonic acid, sulphuretted hydrogen); of metallic vapors (fumes of lead, copper, etc.); of vapor of phosphorus; of air containing metallic particles (*e. g.*, during dry grinding, etc.);—exposure to marsh or other miasmata. Atmospheric impurities.

44. *Ingesta.—Food:* excess of, deficiency of; irregularity of meals;—use of unwholesome food; prolonged use of salted provisions;—deficiency or excess of animal food; deficiency or excess of vegetable food, cooked or uncooked;—use of food cooked or preserved in poisonous vessels;—use of certain special articles of diet (*e. g.*, mussels or other shell-fish, ergoted rye, mushrooms, etc.).—*Drinks:* excess or deficiency of;—unwholesome or poisonous water (from leaden pipes or cisterns, communication with sewers, etc.);—intoxicating drinks, quantity taken; nature of liquid.—*Medicines:* abuse of.—*Poisonous substances.* Ingesta—food. drinks. medicines. poisons.

45. *Sources of mechanical injury:*—muscular efforts; violent exertion, etc.—Blows, falls, etc. Mechanical injuries.

46. *Alterations in health:*—note general condition of health at time of attack;—excessive or defective evacuations, as to quantity and repetition; character of evacuation;—suppression of any customary discharge, etc. Alterations in health.

47. *Excesses:*—over-fatigue; loss of sleep; overwork, bodily or mental;—venereal excesses;—mental anxiety; violent emotion, grief, joy, fright, etc. Excesses.

48. *Exposure to epidemic or endemic influences:*—duration and constancy of patient's residence in locality of disease; exposure to infection; inoculation. Epidemic or endemic influences.

Altered circumstances in life.

49. *Considerable alterations in pecuniary circumstances* or station in life.

§ III. B.

## B.—INVASION.

(Note the exact date of commencement and cessation of each leading symptom.)

Symptoms—general.

50. *Symptoms not necessarily peculiar to any particular disease:*—rigors, their severity, accompanied or not by chattering of teeth or sense of chilliness? their recurrence;—sense of heat, of chilliness; sweating;—general pains or soreness; aching of limbs, loins, etc.; lassitude;—prostration of strength; headache; somnolence;—abdominal pain; anorexia; thirst; nausea; vomiting; diarrhœa, etc.—*Symptoms connected with particular organs:* skin, locomotive organs, organs of digestion, of respiration, etc. (following the order observed in § IV.).

local.

Mode of progress of disease.

51. *Mode of progress of disease:* sudden in invasion and subsequently stationary; ingravescent; remittent; intermittent; diminishing.

§ III. C.

## C.—PROGRESS OF CASE UP TO TIME OF OBSERVATION.

Order of symptoms, etc.

(Note the symptoms in the order of their occurrence, with the precise date of the commencement and duration of each.)

52. How long off work in consequence of illness?—Has patient kept his bed, and how long?—If in hospital, etc., how was the place reached by patient? was he able to walk there, and what was the distance walked?—Treatment employed.

## § IV.—Condition of the Patient at the Time of Observation.

### A.—Generalities.

§ IV. A.

53. *State of nutrition.*—Amount of subcutaneous fat; corpulence, its degree;—emaciation, its degree, peculiarities of tenseness or looseness of integument over deeper structures, degree to which eye is sunk in orbit;—condition of muscles, lessened or not? firm, flabby. Nutrition.

54. *Strength:*—undiminished; diminished, degree of diminution of strength (weaker than usual, very weak, unable to stand, unable to rise in bed). Strength.

55. *Walk:*—uncertain; fearful; staggering, etc. Walk

56. *Weight.* Weight.

57. *Posture:*—indifferent;—recumbent, on back, on right or left side, diagonal, with legs extended or drawn up? with shoulders elevated; sitting, supported or propped up? with head bent forwards; with arms thrown forwards; with arms pressing abdomen.—Patient composed; restless; trunk and limbs tranquil, but head restless; jactitation.—Posture of head in erect or recumbent position or in progression (head supported and steadied by the hands, chin resting on breast, etc.).—(See also 270.) Posture.

58. *Expression of countenance:*—natural (calm, cheerful); suffering (anxious, haggard, risus sardonicus); heavy (indifferent, inattentive, melancholic, idiotic); excited (wild, fierce, threatening, surprised, agitated, terrified); imploring.—*Face:* pale, very pallid; flushed generally, locally, color Countenance: expression. face.

of flush (dark, pink, etc.); locally flushed, but elsewhere pallid; alternating flush and pallor.—

features. *Features:* pinched, drawn, distorted (in what way?);

eyes. lips retracted.—*Eyes:* natural; open, half closed, closed;—heavy; glistening; suffused; glazed;—staring fixedly, at observer, at some supposed object, at vacancy.—

lips. *Lips:* open, closed, compressed;—

jaws. their color natural, pale, livid, etc.—*Jaws:* open; clenched.

General sensations. 59. *Sensations of patient.*—General feeling of illness, in what way? feeling of getting worse, in what way? feeling of improvement, in what way?—Sensation of heat, of flushing; of chilliness, cold, creeping, shivering;—circumstances under which either occur.—Sensitiveness to atmospheric changes of temperature, etc.—Sense of sinking through bed; apprehension of falling, etc.—Pains (269).

Rigors. 60. *Rigors:*—their severity; accompanied or not by chattering of teeth or by sense of chilliness? duration; period of occurrence; frequency; periodicity.

Spirits. 61. *Spirits:*—depressed, anxious, hopeful, elevated, variable;—disposition to laugh, to cry, to sigh, etc.

Temper. 62. *Temper:*—natural; subdued, resigned; irritable, violent (under what circumstances?); variable.

## § IV. B. B.—INTEGUMENT AND ITS APPENDAGES.

*Generally.* *Generally.*

Surface. 63. *Surface:*—soft, harsh; smooth, tense, shining; wrinkled;—cutis anserina.

Color—generally. 64. *Color—over body generally:* natural to the individual; pale, waxy-looking; straw-colored;

greenish; yellow (its shade); dusky; livid.—*Local alteration of color:* on cheeks; over depending parts; over other parts;—apparent cause of color, vascularity or pigment? — locally.

65. *Temperature*—as felt by *the hand:* cool, cold, icy;—hot, very hot, pungent, mordant.—As observed *by thermometer:* in axilla; on front of chest; on being grasped by hand of patient; over paralyzed as compared with non-paralyzed parts.—As *experienced by patient:* comfortable;—cold, creeping, shivering;—warm, hot, burning. — Temperature: to hand. — to thermometer. — to patient.

66. *Cuticle:*—desquamating (at what points?); rough; scaly; thickened. — Cuticle.

67. *Sebaceous follicles:*—of moderate size, large—surrounding skin greasy or thickened;—orifices closed; black points; orifices widely open;—scaly appearance around orifices.—General oiliness of surface. — Sebaceous follicles— — oiliness.

68. *Perspiration:*—its amount, generally; skin very dry, dry, moist, sweating, sweating profusely (state how this is judged of).—Local perspiration, its situation and amount.—In the case both of general and local perspiration, ascertain period of twenty-four hours when it occurs or is most abundant, and the circumstances which give rise to it; its odor; color (affecting color of linen); reaction. — Perspiration: general. — local. — characters.

69. *Vascularity of skin:*—apparent enlargement of small arteries and capillaries, on cheeks, on nose, on other parts;—color given to parts by such enlargement, rosy, dark, like a faded leaf.—Superficial veins (192). — Vascularity.

70. *Contusion and pressure marks:*—their locality; color, uniform, varying from centre towards circumference;—flat or elevated? borders well defined or otherwise?—condition of cuticle over the — Contusion and pressure marks.

marks, perfect, raised by effusion, detached partially or entirely;—condition of cutis vera, lacerated, ulcerated, gangrenous.

Old scars, etc.

71. *Old scars and marks of previous disease:*—their locality (examine arms for vaccination or smallpox marks); their form, color, general characters.

Hair—on head.

72. *Hair—on the head:* its quantity; color;—falling-off; thinning uniformly or falling-off in patches? with desquamating cuticle or not? (note condition of sebaceous glands.)—*On other parts* of body: downiness between scapulæ, on sternum.

on other parts.

Nails.

73. *Nails:*—thick, thin, irregular, convex, incurvated;—their color, livid, blue; presenting white patches or rings.—Excoriations and sores around nails, from picking, etc.

Subcutaneous cellular tissue: œdema.

74. *Subcutaneous cellular tissue:*—puffy, œdematous, pitting on pressure; special locality of œdema, its limits, its variations with posture, time of day, etc.;—if acupuncture be performed, chemical examination of dropsical fluid (examine specially for urea).—Thickened with exudation of any kind; indurated to the feel.—Emphysematous; crepitation under pressure of hand.

thickening.

emphysema.

Serum of vesications.

75. *Serum of vesications:*—its microscopical characters; its chemical characters (examine specially for urea); "examine for arsenic, etc., in cases of suspected poisoning."[1]

Sensibility.

76. *Sensibility:*—alterations of (267).

[1] Those points for observation which are, here or elsewhere in the work, included within commas, have special reference to *medico-legal inquiries.*

*Special Eruptions.*

77. *Locality of eruption;* its extent; symmetrical distribution.

78. *Forms of eruption—*

*Flat or minutely rough:*—arranged in spots, in patches, in blushes,[1] in lines; diffused.—*Form:* round, oval, serpentine, irregular.—*Size.*—*Color:* white, pale red, rosy, dark red, livid, yellow, blue, gray-black, etc.;—effect of pressure on color; unaltered, fading,[2] disappearing, and for what length of time?—apparent cause of color, vascularity, pigment changes, effusion of blood.—*Condition of surface:* smooth; minutely rough; apparent cause of roughness, changes in true skin, changes in cuticle; effect of pressure on roughness;—surface dry, moist (apparent cause of moisture).—*Condition of borders:* defined; undefined, fading into color of surrounding skin.—*Sensation:* spontaneous (itching, pricking, tingling, formication, etc.); developed by pricking, etc.—*Temperature.*—*Phenomena of disappearance* as regards color, roughness, sensation, temperature;—consecutive condition of true skin and cuticle.

*Elevated:*—apparent cause of elevation, thickening of skin alone or accompanied by thicken-

*Special Eruptions.*

Locality.

Forms of eruption—
1. Flat or minutely rough: arrangement.
form.
size.
color.

surface.

borders.

sensation.

temperature.
phenomena of disappearance.

2. Elevated—cause of elevation.

[1] The terms "spots, patches, and blushes" are arbitrary divisions introduced for the sake of convenience; the "spots" are always small; the "patches" larger, and the "blushes" are not less in size than the palm of the hand.

[2] Fading on pressure—*i. e.*, becoming less marked, but not altogether disappearing.

designation of elevation.

number.

distribution.

characters of individual elevations.

ing of subcutaneous tissues? effusion of fluid between cutis and cuticle, scales or crusts.—*Designation of elevation*, according to nosological terms (papula,[1] tubercle, vesicle, bulla, pustule, thickening in patches or diffused, scales, crusts).—*Number* of elevations.—*Distribution* of elevations, isolated, concrete, irregular;—special character of grouping, in rings or parts of rings, in belts, in variously sized islands.[2]—*Individual elevations*, their size, degree of elevation;—their surface, smooth, rough, furrowed (condition of cuticle over it);—their form, flat, acuminated, rounded, umbilicated, raised in centre or at circumference;—their base, flat, raised, hardened; its width;—their border, gradually fading, defined; condition of skin around border as to color, thickening, and sensation;—color (of solid elevation); condition of dryness or moisture (of solid elevation);—character of fluid within vesicles, bullæ, and pustules; its color, transparency, reaction, chemical examination, microscopical examination (645 *et seq.*);—degree of attachment of scales and crusts; kind of attachment (at centre only or over whole

[1] *Papula and tubercle*—solid elevations, separated arbitrarily by difference of size.

*Vesicle and bulla*—cuticular elevations, containing a clear, transparent, or slightly grayish fluid—arbitrarily separated by difference of size.

*Pustule*—cuticular elevation, containing a turbid and usually thick fluid.

[2] The term "island" is used to express the condition sometimes seen, when papulæ or vesicles are arranged in groups, separated from each other by intervals of sound skin.

surface); condition of skin under scales and crusts;—minute anatomy of elevation, of crusts and scales.—*Sensation:* spontaneous; —as tested by pricking, etc.—*Temperature.* —*Simultaneous presence of other conditions; e. g.*, non-elevated eruptions, ulcers, etc.—*Condition of hair* at and between affected points.—*Condition of skin between* affected points, its color, dryness or moisture, sensation, temperature.—*Duration of eruption.*—*Phenomena of disappearance:* of *solid cutaneous elevations;* change of color, subsidence of elevation;—subsequent condition of skin as to hardness, color, sensation, depression or irregularity of surface.—Of *liquid elevations:* absorption of fluid and gradual desiccation; bursting of elevation, incrustation and desiccation; color, thickness, form and degree of moisture and adherence of crusts;—condition of surface after their detachment; period of detachment after desiccation; microscopical characters of crusts (645 *et seq.*).—Of *cuticular alterations*, detachment or breaking up of scales, etc.

sensation. temperature. other conditions present. hair and skin about eruption. duration. phenomena of disappearance.

*Depressed or with ulceration:*—its form; color; condition of surface, of borders. (See *ulcers*, 624.)

3. Depressed or with ulceration.

79. *Cicatrices:*—their form, size, color;—condition of surface, as to elevation, depression, furrowing, bridling, etc.;—sensibility;—condition of hair, sweat-glands and sebaceous follicles.

Cicatrices.

80. *Alterations of sebaceous follicles:*—their size, form; condition of their orifices; condition of skin around, dry, greasy, scaly, thickened.—*Contents of*

Alterations of sebaceous follicles. contents.

*follicles:* their consistence; color; odor; reaction; microscopical characters (645 *et seq.*).

Alterations of hair—

of roots. detachment.

of shaft.

81. *Alterations of hair:*—as affects roots, swelling, humidity;—exudation into; microscopic characters of exudation.—Detachment of hair; mode of detachment.—Color of hair; moisture or dryness?—texture and configuration of shaft.

Alterations of nails—

detachment. shape. color.

82. *Alterations of nails:*—detachment of nails;—alterations in their shape; convexity, thickenings, furrows;—alterations in color; livid, blue, presenting white points or belts, etc.

§ IV. C.

## C.—ORGANS OF LOCOMOTION.

Joints—

pain.

83. *Joints:*—spontaneous *pain*, its character, severity; mode in which produced; most severe when warm or cool? at what period of twenty-four hours most urgent? by what posture most relieved? how affected by manipulation and passive motion of joint?—*Tenderness* on pressure, generally over joint, or in some one spot? effect of impulse upon extremity of limb.—*Temperature.*—*Color* of skin over joint; œdema.—*Position* of limb.—*Size* of joint; its shape; is fluctuation perceptible? Power of *movement* by patient, by observer; amount permitted; creaking or crepitation perceptible?

tenderness.

temperature. color. position. size, &c. movement.

Bones—

pain.

84. *Bones:*—spontaneous *pain*, its character, severity;—effect of weather and temperature upon it; at what period of twenty-four hours most urgent?—*Tenderness.*—*Shape* altered generally or locally (deformities arising from this cause);—swellings, their position, size, shape, solidity, presenting quasi-fluctuation; painful; tender on pressure; condition of skin over them.—*Brittleness* (spontaneous fracture).

tenderness. shape, &c.

brittleness.

85. *Periosteum:*—thickened; tender. — Periosteum.

86. *Tendinous and fibrous structures, aponeuroses, fasciæ, etc.*—pain; tenderness; thickening; contraction; crepitation. — Tendinous structures, etc.

87. *Muscles* generally:—firm; flabby; atrophied. —*Locally:* swollen; atrophied (name muscles or bundles of muscles which are thus affected).—Spontaneous *pain:* particulars as joints (83);—pain on movement;—tenderness on pressure over muscles.—*Power of contraction:* paralysis of special muscles (280);—effect of electricity in exciting contraction (281);—irregular muscular movements; contraction; quiverings; jerkings; cramps; their seat, severity, time of occurrence, customary mode of relief (271 *et seq.*).—Muscular sensibility (268). — Muscles—general physical characters. — pain. — contractility. — sensibility.

## D.—ORGANS OF DIGESTION. — § IV. D.

### *Mouth.* — *Mouth.*

88. *Lips:*—size; thickness;—malformations;—color; pale, red, livid, etc.;—"stains on and about, their color, reaction of stain."—*Condition of surface:* dry; moist; smooth; fissured, oozing of blood from fissures.—*Tension;* flaccidity; œdema; abscess (606 *et seq.*); tumor (631); sloughing (618 *et seq.*); ulcers (624); cicatrices (629).—*Sordes;* exudations (603); foam about lips; salivary dribbling; mucous or purulent-looking matter about lips; "other matters about them."—*Labial glands:* their condition. — Lips—size, color, etc. — surface. — tension, etc. — sordes. — labial glands.

89. *Gums:*—size; consistence; hard, soft, fluctuating; color, generally; blue line along edge; red line along edge, its brightness and width.—*Sponginess* and readiness to bleed; spontaneous — Gums—size, color, etc. — sponginess.



This book is the p
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secretions, etc.

bleeding.—Abnormal *secretions and exudations* (603); abscesses; fungosities; tumors (631); sloughing (618 *et seq.*); ulcers (624).

Teeth—number, etc.

90. *Teeth:*—their number; which absent? irregularity; state of axes; absence of opposing teeth to those of upper or lower jaw;—looseness of teeth;—color; smoothness and polish; transparency, etc.

percussion. tartar. sordes. mastication.

*Effects of percussion* on teeth.—*Tartar* on teeth; situation; thickness.—*Sordes*, their characters.—*Mastication:* hasty or deliberate; performed only on one side of mouth.

Cheek, palate, etc.—cheek. buccal membrane.

91. *Cheek, palate, cavity of mouth:—cheek:* hard, soft; tender (ascertained by external or internal examination?)—*Buccal membrane:* color; stains, "their color," thickness; œdema; dryness or moisture; vesicles; exudations (603).—*Abscesses* (606 *et seq.*): fungosities; tumors (631); sloughing (618 *et seq.*); ulcers (624); cicatrices (629).—*Buccal glands:* their character.—*Steno's ducts:* state of their orifices.—*Temperature* of cavity of mouth (bulb of thermometer being placed between gums and cheek); sense of heat or cold in mouth.—*Hard palate:* malformations.—*Inability to open mouth;* from what cause?

abscesses, etc.

buccal glands. Steno's ducts. temperature of mouth.

hard palate. inability to open mouth.

Tongue—size, etc.

92. *Tongue:* (noting its characters as early as possible in the examination of the patient);—its size; form; thickness;—general color, pale, red, livid, etc.;—color locally, at tip, edges, etc.—*Surface* of tongue; dry; moist; smooth; glazed; fissured; lobulated; exhibiting marks of bites; vesicles.—*Consistence:* hard; soft; fluctuating; tense; flaccid; œdematous; presenting sodden appearance; indented by teeth. Abscesses (606 *et seq.*); tumors (631); fungosities; sloughing (618 *et seq.*); ulcers (624).—*Papillæ:* their size and form,

surface.

consistence, etc.

papillæ.

(stating which papillæ, and where situated).—*Furs* on tongue; their position, color, thickness; degree of adhesion to surface;—mucous coating on tongue; watery aspect of tongue;—exudations, etc.; bleeding.—*Sensations* of heat in tongue, of coldness; pain, throbbing, etc.;—degree of tactile sensibility, at tip, sides, and base of tongue (tested by Weber's method).

furs, etc.

sensations of tongue.

93. *Protrusion of tongue:*—darting, dilatory;—complete, incomplete, impossible; tremulous;—deviation of tongue, its degree, to which side? (280); tongue not withdrawn after protrusion.

Protrusion of tongue.

94. *Odor of breath:*—sweet, acid, sickly, malt-like, alliaceous, putrid, etc.

Odor of breath

95. *Taste in mouth:*—salt, acid, sweet, bitter, putrid, metallic, etc.; clammy sensation.

Taste in mouth.

*Salivary glands.*

*Salivary glands.*

96. *Parotid glands:*—swelling externally behind ramus and angle of jaw; in course of Steno's duct; œdema; fluctuation.—*Pain* on attempting to open mouth;—extent to which mouth can be opened;—tenderness over gland and duct.

Parotid—swelling, etc.

pain, etc.

97. *Sublingual glands:*—their size; condition of surface;—tumors (631); ulcers (624);—state of orifices of ducts, etc.

Sublingual—size, etc.

98. *Submaxillary glands:*—swelling; pain; tenderness;—orifice of ducts, calculi within them, etc.

Submaxillary: swelling, etc.

99. *Saliva:*—deficient;—excessive in quantity; measure of saliva discharged in twenty-four hours; accompanied or not by nausea or drivelling?—color; viscidity; odor;—bloody;—sweet to taste;—its reaction; if acid, due to volatile or fixed acid?

Saliva—amount. characters.

*Throat, etc.*

Uvula.

Soft palate.

Fauces—
size of opening.
pain, etc.
noisy respiration.

Tonsils—
swelling, etc.

Pharynx—
size of cavity, etc.
mucous surface.
secretions, etc.
œdema, etc.

follicles.

projections from nares.
sensations.
tenderness.

Œsophagus—
swelling, etc.
examination with bougie.

*Throat, etc.*

100. *Uvula :*—length; form; thickness; direction of its axis;—surface, smooth, glazed; color;—œdematous; flaccid; abscess (606 *et seq.*); sloughing (618 *et seq.*); ulcers (624); vesicles; exudations (603), etc.

101. *Soft palate :*—(particulars as *Uvula*).

102. *Fauces :*—size of opening; state of pillars (particulars as *Uvula*).—*Pain :* its direction;—other sensations, constriction, dryness, etc.;—tactile sensibility, increased, diminished.—Noisy respiration; snoring.

103. *Tonsils :* — swelling and tenderness externally.—Position of tonsils; distance between them;—size; form; consistence; fluctuating;—tender to touch;—color;—surface; dry, moist, smooth, glazed, uneven; openings on surface;—œdema; abscess (606 *et seq.*); sloughing (618 *et seq.*); ulcers (624); secretions and exudations on surface (603).

104. *Pharynx :*—size of cavity; — apparent thickness of membrane.—Surface of mucous membrane; smooth, glazed, granulated; dry, moist;—vessels apparently full;—its color; "stains."—Secretions; exudations (603); blood on surface.—Œdema; bogginess; fluctuation; abscesses; tumors; sloughing; ulcers and other destructions of substance (624); cicatrices (629).—Condition of follicles.—Projections from posterior nares into cavity.—*Abnormal sensations* in pharynx; burning, dryness, constriction, etc.—Tenderness.

105. *Œsophagus :*—swelling in neck externally.—Examination with bougie; obstruction to passage, its seat, can it be overcome by moderate pressure?

—Signs of dilatation and sacculation?—Is anything visible during retching?—*Pain* in course of gullet, during swallowing or at other times;—sense of constriction, burning, globus, etc.

dilatation.

pain, etc.

106. *Deglutition:*—pain during the act; its seat, extent, duration, character.—Deglutition difficult; period of act at which difficulty is perceived;—attempt to swallow productive of sense of suffocation, of spasm of muscles of throat or pharynx;—is difficulty greatest with solids or liquids?—what matters are swallowed most easily?—is a large gulp of liquid swallowed more easily than a small one?—has the patient any contrivance for rendering the act easier?—does the act produce cough?—do swallowed matters return by nostrils?—is the act affected by temperature of matters?—is the site of obstruction distinct to patient, and how?—is deglutition favored by a recumbent posture? (see also 280.)—Frequently or constantly repeated efforts at deglutition.

Deglutition—painful. other characters.

107. *Regurgitation:*—period after swallowing at which it occurs; attended with effort, anxiety, or nausea? accompanied by any stethoscopic sound?—Physical characters of regurgitated matters; their reaction.

Regurgitation.

regurgitated matters.

*Physical examination of the Abdomen generally.*

*Physical examination of Abdomen generally.*

108. *Inspection:*—Development of subcutaneous fat; œdema of wall, its seat;—hernial protrusions;—swellings over recti muscles;—form of organs visible on exterior, stomach, colon, intestinal convolutions, etc.—*General enlargement* of abdomen, its form;—*local fulness* or enlargement, its seat, form; alteration in form and seat of enlargement

Inspection—fat, etc. in wall. form of organs visible. enlargement.

or fulness with changes in posture of patient; with varying states of stomach and bowels;—eversion of cartilages of false ribs, of tip of ensiform cartilage;—size of costal angles.[1]—*Depression or retraction* of abdomen; general, partial.—*Umbilicus:* position, vertical and transverse;—aspect; convex, concave, flat with or without stretching;—ulceration; discharge from umbilicus;—presence and condition of a portion of umbilical cord.—*Venous enlargements:* on one or both sides? extent; size; tortuosity;—course of blood in enlarged veins.—*Movements:* vermicular, resembling movements of fœtus, etc.; their seat.—*Pulsation:* its seat, extent, violence;—circumstances under which it occurs.—*Fluctuation* on percussion.—Abdominal *respiratory movements*, including those of lower ribs, amount generally or locally.—*State of surface of abdomen:* smooth, shining;—fissures;—lineæ albicantes;—brown line from navel to pubes;—local redness;—surface dry or moist; cuticle desquamating; eruptions (B. p. 43).—Abnormal openings on surface, their seat;—discharge from them; its appearance, odor, etc.; effect of pressure or of respiration upon it.—Sloughing (618 *et seq.*); ulcers (624).

depression.

state of umbilicus.

venous enlargements.

movements.

pulsation.

fluctuation.

respiratory movements.

surface of abdomen.

Measurement:

109. *Measurement:*—circular and semicircular; at level of umbilicus, of greatest abdominal prominence;—variations of each with ordinary and deep inspiration.—Measurement between umbilicus and lower extremity of sternum; between umbilicus and pubic symphysis.—Application of *chest-measurer* to determine respiratory movements of abdomen, anteriorly and laterally; of lower ribs, etc.

chest-measurer.

[1] "*Costal angle*"—i. e. the angle included between the middle line of the abdomen and the margin of the cartilages of the false ribs.

110. *Palpation*:—Indications afforded confirmatory of the results of inspection (108).—*Temperature* of surface.—*Resistance* to pressure unusually great; generally, or locally? its exact limits, if local; confined to one side, or observed upon both symmetrically? confined to recti muscles, on one side or on both? disappearing under steady pressure;—knotted feel of wall.—Sense of resistance less than natural, generally or locally? parietes flaccid.—Sense of thickening of the soft parietes of the abdomen;—its apparent cause, deposition of fat, œdema, thickening of deeper tissues;—sense of unusual thinness of wall.—*Elasticity* of wall; increased, diminished.—*Tumor* (130).—*Movableness* of abnormal parietes diminished;—sense of adhesion of soft wall to deep parts.—*Sense of movement* beneath the hand;—its character; gradual elevation or depression, vermicular movement, fluttering, resembling that of living body in abdomen, etc.;—its seat; readiness of perception; apparent depth from surface; activity; frequency, etc.—*Vibration*: arising from passage of intestinal gas;—friction-vibration; its locality (over a tumor or not); perceptible with or without exerting pressure; during acts of respiration; its character.—*Sense of crepitation* or grating under pressure;—gurgling;—their exact locality; apparent depth from surface; connection with palpable tumor.—*Fluctuation* (or bogginess): posture in which discovered; seat; deep or superficial? following immediately the impulse given to surface or not? apparent size of waves;—effect of intervening pressure upon it; effect of change of posture upon its seat and readiness of perception;—peripheric fluctuation.—*Repercussion* (stating posture in which perceived).—

Palpation—
temperature.
resistance.
sense of thickening.
sense of thinness.
elasticity.
tumor.
movableness of wall.
movement.
vibration.
gaseous.
friction.
crepitation.
gurgling.
fluctuation.
repercussion.

pulsation. *Pulsation:* seat; transmitted from heart? connected or not with tumor (186)? superficial or deep? —in course of aorta or other known vessel, within abdomen, or in its wall? extent of vessel over which perceived;—its abruptness; expansile force; direction merely elevating hand or presenting lateral expansion also?—time of day or circumstances under which it occurs; its permanence;—accompanied or not by increased pulsation of femoral arteries?—*Thrill:* connected or not with tumor (186)? continuous or intermittent? synchronous with arterial systole or diastole? seat;—extent over which felt.—Effect of *sudden deep pressure* in various parts; tumor perceptible?

thrill.

effect of sudden deep pressure.

Percussion— 111. *Percussion:*—after determining boundaries of liver (115), spleen (119), and stomach (123).—*Abdominal resonance:* unusually extensive upwards; diminished in extent (in either case note exact limits);—replacing dulness of liver;—unusually uniform in pitch over all parts of surface;—pitch and special characters of resonance; tubular, tympanitic, with metallic tinkling or humoric sound (noting exact seat of these and their degree of permanence).—*Dulness* (noting posture in which observed): exact seat, extent, and limits;—presenting or not a line of level? limited by a curved or irregular line?—replaced by resonance on deep pressure; effect of change of posture on results of percussion; is the dulness the same on deep or superficial percussion?—*Sense of resistance* or elasticity perceived by percussing fingers;—hydatic fremitus; readiness of perception.

resonance.

dulness.

resistance.

Auscultation: borborygmi. 112. *Auscultation:*—(not including signs noted under spleen (120), and stomach (124)).—*Borborygmi:* locality; loudness (heard at a distance from

patient); special character;—circumstances under which they occur; permanence;—intestinal sounds inaudible under all circumstances over abdomen (note extent, and whether over tumor or not).—*Friction-sound:* (particulars as *friction-vibration*, 110); its special similitude.—*Crepitation* or grating: how developed? its position, connection with tumor or not, deep or superficial?—*Gurgling:* its seat, audible on pressure or independently of it, with inspiratory acts; special characters, accompanied by metallic tinkling.—*Fluctuation-sound:* spontaneous; its seat, connection with tumor;—observed on succession.—Tænia-sound;—hydatic sound, superficial or deep-seated?—*Sound of fœtal movements.*—*Sounds of aorta:* impulsive sound increased.—*Murmur: arterial;* its seat, connection with tumor, extent, intensity, special characters; accompanying systole or diastole of vessel or both? accompanied by shock or not? influenced by pressure on either side of stethoscope? effect of posture on its development;—*venous* murmur; its seat, extent, intensity, special similitude;—*continuous* murmur (audible at a distance from patient);—*uterine* murmur; effect of posture upon it; its seat, loudness, special character.—*Fœtal heart sounds:* where best heard, and to what extent? their frequency; readiness of perception; effect of posture on perception of them.—Sounds audible at a distance from patient.

friction-sound. crepitation. gurgling. fluctuation-sound. tænia-sound, etc. fœtal movements. aortic impulsive sound. murmur. fœtal heart.

### *Physical examination of the Liver, Gall-bladder, and Ducts.*

*Physical examination of Liver, Gall-bladder, and Ducts.*

113. *Inspection:*—Fulness or bulging (specially affecting right hypochondrium, epigastrium, or up-

Inspection—fulness, etc.

per part of abdomen);—state of depression below cartilages of false ribs;—visible downward extent of liver;—state of intercostal space on right side;—special prominence (pointing) apparent, their seat and form;—variation in fulness, etc., with varying states of stomach or after vomiting.—

color of skin. Color of skin over liver or special prominences;

œdema. œdema over liver.

Palpation— 114. *Palpation:*—Temperature over hepatic region.—

resistance. *Resistance* to pressure below false ribs on right side, as compared with left; downward extent of resistance;—contraction of right or left rectus muscle on pressure; of other muscles of the soft

edge of liver. wall.—*Edge of liver* (if palpable, after evacuation of bowels): its position and direction; effects of standing or recumbent posture or of deep inspiration on its position;—its characters, indurated, thin, thick, irregular, etc.;—interlobular notch;

surface of liver. its depth, direction.—*Surface of liver:* smooth, nodulated;—character of elevations on surface, round, pitted, etc.;—form of organ tuberous:—sense of adhesion to parietes; friction palpable over

consistence of liver. it (110);—consistence of liver; hard, soft; presenting bogginess or fluctuation (connected with

gall-bladder. tumor or not?)—*Gall-bladder:* is its form palpable? tumor in its situation, its physical characters (130); presenting fluctuation (generally or in centre only?); condition of surrounding tissues as to hardness, etc.; crepitation.

Percussion— dulness. 115. *Percussion:*—Extent of dulness (superficial and deep); vertical (in line of nipple, of axilla, and posteriorly); transverse;—effect of inspiration, posture, or varying states of stomach or colon on extent of dulness;—lower outline of dulness; amount of stomach or intestinal note near margins

of liver.—Resonance over liver, generally (the dulness being quite lost);—locally; its special character.—Hydatic fremitus. resonance.

116. *Auscultation*:—Breath sound, audible or not over liver? its special characters;—voice and cough sounds audible, their special characters;—gurgling; how developed, by respiration, cough, or pressure? Auscultation.

*Physical examination of the Spleen.* *Physical examination of Spleen.*

117. *Inspection*:—Fulness or bulging (in left hypochondrium, epigastrium, left side of abdomen, etc.); well defined?—effect of change of posture upon it;—condition of intercostal spaces over region of spleen. Inspection.

118. *Palpation*:—Spleen felt below margin of left false ribs; extent of tumor;—direction of long axis; form; outline and characters of anterior and posterior margins;—movableness of tumor; effect of posture on its position;—condition of its surface, smooth, nodulated;—consistence; fluctuation. Palpation.

119. *Percussion*:—Extent of dulness, vertical and transverse (variation in its extent during and between paroxysms of *ague*);—form of organ as traced out by percussion;—hydatic fremitus. Percussion.

120. *Auscultation*:—Splenic murmur; its exact seat, characters, etc. (194). Auscultation.

*Physical examination of the Stomach.* *Physical examination of Stomach.*

121. *Inspection*:—Prominence (in epigastrium, over cartilages of left false ribs, and hypochondrium; elsewhere in soft wall);—variation of fulness with varying conditions of stomach (after Inspection.

meals or vomiting); with change of posture;—form of stomach traceable through parietes.

Palpation. 122. *Palpation:*—Temperature over region of stomach.—Sense of resistance or yielding at epigastrium, or below margin of false ribs;—tumor (130); effect of posture, meals, etc. upon it.—Sense of grating (as from foreign substances within it);—fluctuation; effect of posture, meals, and vomiting upon it.

Percussion. 123. *Percussion:*—Stomach-resonance; its extent, position, special character (lower limit of stomach determined by percussion after a large draught of water).—Dulness; its seat, extent, permanence.—Effect of posture, meals, or vomiting upon the signs derived from percussion.

Auscultation. 124. *Auscultation:*—Gurgling under pressure over seat of stomach; its locality, permanence;—fluctuation sound on succussion, its permanence;—sounds of liquid and food entering stomach; where heard?—spontaneous sounds (churning, etc.); their permanence; special characters.—Special characters of heart's sounds as heard over stomach.

*Physical examination of Colon, Rectum, and Anus.*

## *Physical examination of the Colon, Rectum, and Anus.*

Inspection—prominence. 125. *Inspection:*—*Colon:* Prominence (specially affecting right or left iliac regions, flanks or elsewhere in course of colon); its amount, constancy;—outline and course of colon traceable through parietes;—effect of defecation upon prominence.—*Anus:* its form; fissures; fistulæ; vegetations; tumors; piles; ulcers; excoriation.—*Prolapsus of rectum:* its extent, circumstances under which it occurs;—characters of prolapsed portion;

prolapsus.

color, vascularity, etc.—*Examination by speculum:* state of mucous surface; its color, vascularity;—hemorrhage from it; secretions upon it;—apertures; sloughing (618 *et seq.*); ulcers (624); cicatrices (629), etc.; exact position of these. — examination by speculum.

126. *Palpation:*—Tumor; in course of colon, in iliac fossæ, etc.; its characters (130); effect of purgatives or enemata upon it.—Crepitation or grating; its seat, connection with tumor, apparent depth.—Gurgling on pressure; its seat.—*Examination per anum:* Imperforation of anus; coarctation; resistance to introduction of finger;—capacity of rectum; temperature of rectum;—fecal accumulation within it; foreign bodies; tumor;—stricture; its seat, form; length of strictured portion; yielding of walls on pressure (see also 235). —Examination by *bougie;* length to which bougie may be passed. — Palpation—tumor. — crepitation. — gurgling. — examination per anum. — examination by bougie.

127. *Percussion:*—in course of colon or in iliac regions, over tumor (131); special characters of sounds;—effect of defecation upon its results.—Length of colon over which the dulness produced by a large and forcible injection extends (noting quantity of water which may be injected).—Percussion over sacrum. — Percussion— — after injection.

128. *Auscultation:*—Audible gurgling; under pressure or independently of it;—spontaneous sounds, their seat and characters (112).—Extent of colon into which the liquid of a large and forcible injection may be heard to enter. — Auscultation: — with injection.

*Physical examination of Abdominal Tumors.* — *Physical examination of Abdominal Tumors.*

129. *Inspection:*—(see Physical examination of abdomen generally, 108; of liver, 113; spleen, 117; — Inspection.

and stomach, 121.)—Color of skin over tumor;—œdema, pointing, etc.

Palpation—number. position. size, etc. form. surface. consistence. circumstances affecting it. movableness.

130. *Palpation:*—Apparent number of tumors; united or separate?—mode in which most readily perceived;—exact position of tumor; traceable under margins of false ribs on either side, or towards anterior or lateral parts of trunk; felt descending into pelvis, from centre or from one side of abdomen;—dimensions of tumor; extent of abdomen which it occupies;—its relation to the surface, deep or superficial? its apparent continuity with known solid organs (liver, spleen, uterus, etc.). —*Form:* similar to that of known organs (liver, kidney, etc.); of limbs or other parts of a child; of certain foreign bodies;—condition of its margin, well or ill-defined? can fingers be passed beneath it, and at what part?—margin regular or irregular, notched, hard or soft, thick or thin, etc.?—*Surface:* smooth; irregular; lobulated; size, form, and uniformity of irregularities or lobulations.—*Consistence:* hard, soft, elastic, impressible;—presenting yielding line across surface;—bogginess; fluctuation, deep or superficial, limited or not to extent of tumor? effect of posture upon its seat and readiness of perception.—*Effect of pressure,* of varying states of stomach and colon, of purgatives or enemata, and of catheterism on tumor.—*Movableness* of tumor; effect of posture of patient upon its position and distinctness;—readiness and extent to which it may be displaced by the hands (upwards, downwards, laterally); slipping from under hand; rolling under hand;—soft parietes movable over it; soft parietes apparently adherent to it, tumor and soft wall moving together; skin attached to tumor;—radiating portions perceived at its mar-

gin;—movableness of apparent tuberosities of surface apart from general mass of tumor;—movement of tumor on deep inspiration;—when more than one tumor is present, note independent mobility of them.—Apparent *weight* of tumor.—*Sense of spontaneous movement* in tumor; its character.—*Crepitation*, gurgling, etc. on pressure.—*Percussion.*—*Pulsation:* its exact seat; extent; is it confined to a line across surface of tumor? (see also *Swellings connected with arteries*, p. 80);—abruptness or expansile force;—direction, merely elevating hand, or in lateral direction also?—permanence; circumstances affecting it; effect of posture (on hands and knees, etc.) upon it; effect of displacing tumor upon it.—*Thrill:* accompanying pulsation; with arterial systole or diastole or both? continuous.

weight.
spontaneous movement.
pulsation.
thrill.

131. *Percussion:*—Resonance; its special character, uniformity of pitch, etc.—Dulness; its extent and outline; uniform or not over all parts of tumor? continuity of dulness with that of known organs, (liver, spleen, uterus, etc.)—Results of superficial and deep percussion (specially at margin of tumor); effect of posture on percussion sounds; effect of meals, vomiting, enemata, purgation, catheterism, etc.; extent of dulness of tumor modified or not by deep inspiration?—Dulness of tumor crossed by a resonant line (exact seat and direction of line);—dulness intermixed with resonance.—Hydatic fremitus.—Sense of resistance or elasticity perceived; uniform or not over surface of tumor?

Percussion—resonance.
dulness.
circumstances affecting percussion sound.
dulness and resonance.
hydatic fremitus.
resistance.

132. *Auscultation:* (see Physical examination of the abdomen generally, 112; of liver, 116; spleen, 120; stomach, 124; and colon, 128.)—Impulsive sound;—diastolic shock.—*Arterial mur-*

Auscultation:
arterial murmur.

*mur:* its exact seat and extent; extent of vessel upwards and downwards from tumor over which heard;—part of tumor at which heard, in front only or laterally also? following a line on surface of tumor;—characters; loud, soft, harsh, etc.;—systolic, diastolic, or both? accompanied or not by shock or pulsation?—effect of strong pressure upon it; of pressure on either side of stethoscope; of change of posture, from recumbent to erect, or *vice versâ;* of posture on hands and knees, etc.;—effect of displacing tumor upon it (see also, *Swellings connected with arteries,* p. 42);—effect of any other circumstances upon its loudness or other characters.—*Venous murmur:* its exact seat; extent; characters;—circumstances modifying it.—*Continuous murmur:* its loudness (heard at a distance from patient?); effect of arterial systole or inspirations upon its intensity.—*Uterine sound:* its seat; extent; character; intensity; influenced or not by posture of patient?—*Hydatic sound.*

venous murmur.

continuous murmur.

uterine sound.

hydatic sound.

*General symptoms referable to the Abdomen.*

*General symptoms.*

Abnormal sensations—pain.

133. *Abnormal sensations:*—*Pain:* precise seat, extent;—severity, seat of greatest intensity;—direction; towards the spine, chest, shoulders, pelvis, etc.;—special character; like a weight, twisting, lancinating, burning, etc.—Time of its occurrence; constant, paroxysmal, periodical;—when stomach is full or empty? if after a meal, after which meal and how soon after it?—effect of solid food and of hot, tepid, or cold liquids, or of alcoholic or stimulant liquids, in inducing or relieving it.—Duration.—Effect of posture upon it (note posture of patient during its presence);—effect of pressure with flat hand or points of fingers in increasing or relieving

it;—effect of inspiration or coughing upon it;—effect of agitation of bed or apartment upon it;—its connection with mental agitation.—Does it precede or follow acts of defecation?—has it any connection in point of time with other symptoms, (borborygmi, vomiting, eructations, etc.)?—is it relieved by expulsion of gaseous, liquid, or solid matters from stomach or rectum?—has the patient any contrivance for relieving it?—*Other abnormal sensations:* of sinking, heat, weight, fulness, dragging, constriction (particulars as *Pain*).—Sensation of food passing over a circumscribed sore spot in stomach. Sensation of movement in abdomen; seat, character, and special similitude;—circumstances under which it occurs.

other sensations.

134. *Tenderness:*—seat and extent;—connection with tumor;—special direction of pressure necessary to elicit it;—amount of pressure by which it is elicited, pinching the skin gently, dragging finger over its surface, etc.; moderate pressure; strong and deep pressure;—is it observed when attention of patient is withdrawn?—does patient cry out before being touched?—is pressure of bedclothes borne?—Does tenderness extend beyond limits of the abdomen; if so, in what direction, and how far?

Tenderness.

135. *Appetite:*—wanting (partially or wholly), for all or for certain meals? with or without loathing?—voracious;—untimely (at night, shortly after a meal, etc.);—depraved (with voracity?)—When is most appetite felt?—Special desire or preference for certain kinds of food; for tasteless, acid, alkaline, sweet, or bitter articles; for sugar, salt, vegetables, fruit, meat, etc.;—special dislike of certain kinds of food.—*Weight of food* eaten in

Appetite—

weight of food eaten.

nature of food.

twenty-four hours;—nature of food, relative amount of solid and liquid matters contained in it;—proportion of nitrogenous and non-nitrogenous matter in food.

Thirst—

136. *Thirst:*—wanting;—dislike or horror of liquids; horror of sight or sound of liquids;—period when thirst is chiefly felt; after meals, after special meals or articles of food;—excessive thirst; relieved by taking large draughts of water or other thin liquid (best cold or warm?), by repeatedly moistening mouth and throat.—Special desire or preference for certain kinds of liquid, tasteless, acid, alkaline, sweet, bitter, or salt; for broths, etc.; —special dislike of the above.—*Quantity drunk* in twenty-four hours by measure; nature of drink.

quantity drunk.

nature of drink.

Nausea.

137. *Nausea:*—time of its occurrence; accompanied or not by retching or vomiting?—duration; —occurring after food or drink generally, or after particular kinds of food.

Vomiting—

138. *Vomiting:*—time of its occurrence; frequency or periodicity; occurring after food or drink, generally; after special kinds of food or drink; after certain meals only; time after any meal at which it occurs; occurring after minute quantities of food or drink; when stomach is empty.—Occurring in one posture more than in another; on changing the posture;—during act of defecation.

its immediate cause.

—Its immediate cause;—spontaneous;—induced by coughing; the tickling of an elongated uvula; bodily effort; mental emotion or passion; the influence of pain; the influence of bad odors (arising from the patient himself or near him); the taste and smell of eructated gases or liquids, of discharges from the nares, etc.—Is it accompanied or preceded by nausea, or by any other abnormal sensation?—is

accompaniments.

it accompanied by coughing?—Characters; facility; painful or not? accompanied by straining efforts. —Does it relieve any uneasy sensations temporarily or permanently?—Has the patient any contrivance for obviating its occurrence?

relief it affords.

139. *Vomited matters:*[1]—quantity; taste as perceived by patient; odor; color, uniform or various? "changed by exposure to light;" aeration; yeasty appearance.—*Contents:—food;* its state of division; special articles of food distinguishable; indigestible substances; degree of chymification of vomited food;—"*foreign substances* recognizable by the eye; organic (*e. g.* portions of seeds, leaves, elytræ), their characters, etc.; mineral (crystals, etc.);"—*feces;* their consistence, color, and other characters;—*blood;* its quantity, consistence, aeration; pure or mixed with other matters? —sooty matters; coffee-ground matters;—oily matters; watery fluid; mucus; pus; bile; worms; hydatids; calculi, etc.—*Microscopical examination* of vomited matters; of matters picked out; of liquid (645 *et seq.*);—special inquiry to be made for blood, pus, exudation-corpuscles, cancer-cells, sarcinæ.—*Chemical examination*[2] of vomited matters; their reaction, before and after evaporation;—of matters picked out; of liquid;—special examination for bile, sugar, ammonia, "urine; the vegetable or mineral poisons."[3]

Vomited matters—appearance, etc.

contents.

microscopical examination.

chemical examination.

140. *Eructation or regurgitation:*—time of oc-

Eructation—

[1] These particulars apply also to matters removed by stomach-pump.

[2] In this and every other "chemical examination," note accurately the process adopted.

[3] "Poisons to be sought for, also, in articles of dress etc. on which vomited matters may have fallen."

currence; relation to quantity or quality of food; time which elapses after food;—accompanied or not by nausea?—*Eructated or regurgitated matters:* gas, liquid, food;—their quantity, taste, odor;—if liquid, its apparent temperature and physical characters. (Further particulars as *Vomited matters*, 139.)

nature of eructated matters.

Hiccup.

141. *Hiccup:*—its time of occurrence; frequency; periodicity; noisy or not? continuing or not during sleep?

Defecation—

142. *Defecation:*—its frequency; time elapsed since last stool; periods of defecation;—position chosen during the act;—amount of effort required; force of evacuation.—Is obedience to the desire ever in vain? is any obstruction felt, and where?—Pain preceding, during, or after the act; its seat, characters, duration;—tenesmus.—Stools passed beneath patient; from carelessness, wilfulness, local defect of sensibility, inability to retain motion, general stupor, etc. (280)?

pain.

involuntary.

Stools—physical character.

143. *Stools:*—quantity; at each evacuation in the twenty-four hours (measured or weighed);—odor;—consistence, solid, liquid, pultaceous, yeasty-looking; if solid, note any peculiarity in width or form, and whether it is of constant occurrence; degree of solidity or hardness;—color; aeration.—*Constituents of stools:*—*fecal matters;* unchanged food; special articles of food distinguishable; food in a state of incomplete digestion;—*foreign substances* recognizable by the eye;—*blood;* passed alone; mixed with feces, uniformly, or in patches or striæ?—following the act of defecation;—physical characters of the blood;—mucus; pus; fibrinous matter; oily matter; epithelial shreds; casts of intestines; portions of intestine (their

constituents.

physical characters); calculi (their physical characters); worms; hydatids; urine, etc.—*Microscopical examination* of stools: of matters picked out; of liquid (particulars as *Vomited matters*, 139).—*Chemical examination* of stools: their reaction;—of matters picked out; of liquid;—special examination for albumen, fat, phosphate of magnesia and ammonia, mineral substances taken as medicine or "as poisons." microscopical examination. chemical examination.

144. *Anus:*—pain; sense of itching; constriction; dragging; sense of heat;—discharges from anus. Anus.

*Results of Paracentesis Abdominis.* *Results of Paracentesis Abdominis.*

145. *Operation:*—its mode of performance, seat of puncture and peculiarities of operation; readiness of flow of fluid; completeness of evacuation; necessity for a second puncture. Operation.

146. *Matters removed:*—their quantity (measured); color; degree of transparency; consistence; odor; specific gravity;—relative character of fluid at different periods of its flow;—flocculi in fluid, their quantity and apparent characters.—Changes occurring in fluid after standing, coagulation, etc. —*Microscopical examination* of fluid; of matters picked out (645 *et seq.*).—*Chemical examination* of fluid; special examination for fibrin, for albumen (its kind). Matters removed. microscopical examination. chemical examination.

147. *Physical examination of abdomen* after tapping. Physical examination of abdomen after tapping.

§ IV. E.

## E.—ORGANS OF RESPIRATION.

*Nares.*

*Nares, etc.*

Nares—external characters.

148. *Nares:*—form; condition of alæ; size of anterior aperture of nares; eruption about alæ (77 *et seq.*); ulcers (624); excoriations from picking, etc.;—condition of cartilaginous septum;—condition of bones.—*Mucous membrane* (as visible); its color; raw appearance of it; covered with secretion, liquid or adherent.—Tumors on mucous membrane (631); polypi; ulcers (624), etc.—Foreign bodies.—*Discharge from nares:*—quantity; color and other physical characters; fetor;—containing blood, particles of bone, etc.—*Hemorrhage from nares:*—its amount; circumstances inducing it.—*Movements of alæ* in respiration:—their amount;—equal or unequal on the two sides?

mucous membrane.

tumors.

foreign bodies.

discharge.

hemorrhage.

movements of alæ.

Sensibility—pain, etc.

tactile sensibility.

149. *Sensibility, etc.:*—pain, its characters; tenderness; itching;—sense of fulness, affected or not by weather?—Alteration in tactile sensibility (tested by introduction of substances into nostrils, snuff, etc.);—alteration in special sense of smell (315).

Sneezing.

150. *Sneezing:*—its frequency; circumstances inducing it.

Frontal sinuses.

151. *Frontal sinuses:*—their apparent development.—Painful sensations referred to their site; weight, stuffing; soreness, etc.

*Upper Air-Passages and Vocal Apparatus.*

*Upper Air-Passages, etc.*

152. *Examination of throat externally.—Size of larynx and trachea:* their form;—ulcers;—fistulæ or openings communicating with air-passages; passage of air through them during acts of respiration;—swellings externally about these organs; their characters, œdematous, fluctuating, etc.—*Manual examination:* laryngeal fremitus; heat of surface; crepitation.—*Percussion* applied over larynx and trachea, its results.—*Auscultation:* altered respiration audible at a distance; its characters, rough, stridulous;—expiration prolonged, laborious;—constancy or paroxysmal character of the above phenomena;—auscultation by aid of stethoscope; respiration rough, whistling, accompanied by tracheal or laryngeal rhonchus.

Examination of throat externally—size of larynx and trachea, etc.

manual examination.

percussion.

auscultation.

153. *Epiglottis* (examined with or without speculum):—wanting;—prominent; thickened; flat; curled;—its color;—irregular on surface or on edge; ulcerated; covered with secretion; presenting enlarged glands.—Examination with the finger.

Epiglottis.

154. *Glottis:*—result of examination with speculum.

Glottis.

155. *Sensibility:*—pain or other abnormal sensation;—pain on swallowing, speaking, singing, etc.;—tenderness on pressure.

Sensibility.

156. *Voice:*—wheezing; hoarse; rough; croupy; cracked;—feeble, almost inaudible, whispering;—totally lost; constancy of the aphonia or circumstances under which it occurs.

Voice.

157. *Other symptoms, e. g.*, cough, expectoration, hemorrhage, etc. (particulars, see *General thoracic symptoms*, p. 37).

Other symptoms.

*Physical examination of Lungs, etc.*

## *Physical examination of the Lungs, Pleuræ, etc.*

(In all cases, the corresponding parts on the two sides should be compared.)

Inspection—form of thorax.

158. *Inspection.—Form of the thorax:* general shape;—elevation or flattening of the post-clavicular and infra-clavicular spaces; condition of suprasternal hollow; form of clavicles and direction of their curves.—Height of the shoulders; shoulders thrown forwards;—position of scapulæ, their prominence, nearness to spine, rotation, etc.—Position of nipples; their distance in a vertical line from the clavicle, and in a horizontal line from the median line of the trunk.—Form of the sternum; its relation to the median line of the body.—Form of the spine; curvatures, lateral or angular (301).—Form of lateral regions of chest; general prominence or retraction.—Condition of intercostal spaces; their width; bulging or depression; influence of respiratory acts upon them.—Local bulging or retraction, its seat, amount, etc.—Costal angles, their size.—*Size of thorax* (general idea of it, making allowance for fatness or emaciation).—*Thoracic movements:* rhythm of respiratory movements, equable or not?—relative duration of inspiratory and expiratory acts, as measured by seconds;—amount and relation of costal and abdominal expansion in inspiration; amount of costal elevation in inspiration as compared with expansion;—thoracic retraction in inspiration, its seat, extent;—movements at any particular spot, compared with those at a corresponding point on opposite side;—

size of thorax.

movements.

condition of intercostal spaces during inspiration and expiration.—*Fluctuation.*

fluctuation.

159. *Measurement* (by tape or by callipers):—in rest and in motion; in deep, and medium inspiration and expiration.—*General* measurements; circular, opposite ensiform cartilage, midway between nipples and clavicles;—transverse, from point of one acromion to that of the other, in axillæ, at base of chest;—antero-posterior, under the clavicles, at base of chest;—vertical, from clavicle to most depending point of ribs.—*Partial* measurement; from nipple to middle line of sternum;—from sterno-clavicular articulation to nipple;—from nipple to antero-superior spine of ilium;—from most dependent point of twelfth rib to same process.—Measurement by *chest-measurer*, in tranquil and forced breathing.—Results of use of *spirometer*.

Measurement: general. partial. by chest-measurer. spirometer.

160. *Palpation:*—Fremitus, vocal, tussive, rhonchal, friction, pulsatile;—pulsation;—fluctuation, peripheric, rhonchal.

Palpation.

161. *Percussion:*—Pulmonary sound, too dull; special character of dulness, wooden, cracked-metal;—sound too clear; special character of clearness, tympanitic, amphoric, tubular;—seat and extent of dull or clear sounds;—fulness or emptiness of sounds.—Influence of deep inspiration or expiration upon sounds or upon their limits; influence of alteration of position upon them.—Resistance of parts percussed.

Percussion—dulness. clearness. characters affecting percussion sounds. resistance.

162. *Auscultation* (specifying the different regions): during easy, deep, and tussive respiration.—*Inspiratory sound:* its intensity, natural, exaggerated, weak, suppressed;—its rhythm, even, jerking, cog-wheeled;—its quality, natural, harsh,

Auscultation: inspiration.

expiration.

rhonchi.

friction-sound.

metallic tinkling.

voice.

cough.

bronchial,[1] blowing (diffuse or tubular), hollow,[2] metallic.[3]—*Expiratory sound:* its intensity, actual and as compared with inspiratory;—its rhythm, divided from inspiratory, jerking;—its quality (see *Inspiratory sound*, supra).—*Rhonchi:* their quality, cooing, droning, sonorous, sibilant, clicking, crackling, creaking, bubbling, metallic;—dry or moist? if moist, size of bubbles (large, small, equal or unequal);—how evolved (slowly, rapidly, in puffs, etc.)?—at what time audible, with inspiratory act, throughout, or at its commencement or close, with expiratory act, and at what part of it, with tranquil, forced, or tussive respiration?—constantly or only occasionally audible?—effect of coughing and expectoration upon rhonchi.—*Friction-sound:* its quality, grazing, rubbing, creaking;—its intensity;—when audible, during whole act or at beginning or close of respiration? with expiration entirely or at beginning or close? with easy or forced respiration?—Effect of position upon it; effect of heart's impulse upon it.—*Metallic tinkling:* at what time heard, with respiration, cough, or voice?—constantly or occasionally audible?—*Voice:* intensity of vocal resonance, natural, diminished, increased;—with or without vibration;—its qualities or special characters, twanging, nasal, ægophonic, metallic; distinctness or indistinctness of articulation;—constancy or otherwise of increased resonance or of special quality;—effect of coughing and expectoration upon vocal resonance.—*Cough:* its reso-

[1] "Bronchial:"—quality and intensity equal to natural bronchial respiration, as heard under first bone of sternum.

[2] "Hollow" includes what is sometimes called *cavernous.*

[3] "Hollow" and "metallic" include *amphoric.*

nance.—*Heart sounds* and murmurs (178): transmission of them; degree and direction of their transmission.—*Succussion:* its results; thoracic fluctuation. heart sounds. succussion.

*General Thoracic Symptoms.* *General Symptoms.*

163. *Pain in the chest:*—exact locality (if there be more kinds of pain than one, each should be distinctly particularized);—severity;—character, dull, aching, sharp, stabbing, catching, burning etc.;—direction, towards the spine, shoulders, down the arms, etc.;—mode in which it is developed, by breathing (ordinary or forced), by sighing, by coughing, by movement of the trunk, arms, or other parts of the body, etc.;—effect of posture upon the pain;—pain occurring after food;—relief or otherwise afforded by eructation, etc.—*Other abnormal sensations:* weight; oppression; dragging, etc.;—circumstances under which they occur. Pain— other sensations.

164. *Tenderness:*—its seat; perceived on pressure beneath margin of false ribs, between ribs, over certain muscles;—perceived on gentle pinching of skin, on rubbing the muscles over the surface of the ribs and cartilages, etc. Tenderness.

165. *Cough*:—mode of its excitement (by breathing cold air, etc.); severity; frequency; periods of its occurrence;—character, short, hacking, prolonged, uncontrollable, paroxysmal, noisy, barking, wheezing, hoarse, ringing, etc.;—character of the back-draught, hooping, crowing, etc.;—cough, dry or accompanied by expectoration?—attended by pain or other uneasy sensation in chest (163) or elsewhere;—followed by vomiting, sweating, ex- Cough.

haustion, etc.;—effect of posture on cough.—

hawking. Hawking.

Expectoration. 166. *Expectoration:*— easy or difficult?—accompanied or not by pain?—effect of posture on readiness of expectoration;—relief afforded by it to dyspnœa or other uneasy sensations.

Sputa—quantity. physical characters. 167. *Sputa:*— their quantity (measured), in each twelve hours of the twenty-four;—their form, round, flat, discoid, ragged, indefinite;—size of the masses;—their transparency or opacity; color, white gray, yellow, green, pink, red, rusty, brown, blackish;—viscidity or adhesion to vessel;—odor;—taste and apparent temperature to the patient.—Special characters; thin, serous, frothy;—containing particles like boiled rice, or little matters of other kinds (*e.g.*, tartar of teeth, etc.); containing pseudo-membranous matters; like currant jelly or prune juice; mixed with fibrinous casts; mixed with blood streaks; intimately mixed with blood; containing calcareous matter, hydatids, etc.—*Microscopical examination* of sputa (645 *et seq.*): presence of epithelium (flat, cylinder, ciliated), granular cells, nucleated cells, fibrinous coagula (their form and length), blood-disks, fat, molecular matter, crystals, pseudo-membrane, fibres (their characters), vessels, tuberculous matter, fungi, foreign substances derived from food (starch, muscular fibres, vegetable cells and fibres, etc.).—*Chemical examination* of sputa: their reaction; if liquid enough, test for albumen.

special characters.

microscopical examination.

chemical examination.

Expectoration of blood—quantity. mode of expulsion. characters. 168. *Expectoration of blood:*—quantity of blood expelled;—mode in which brought up; in mouthfuls, in a gush, by an action like vomiting, by hawking, etc.;—its color; clotted or not; its degree of aeration;—pure or mixed with sputa, in streaks or uniformly, in masses surrounded by

sputa? — Immediate cause of the hæmoptysis; coughing, exertion of the voice, muscular exertion of other kinds.—Sensations preceding it; heat of chest, salt or other taste in mouth, etc.—Repetition of hæmoptysis; at what intervals?—character of each discharge (as above).—Hæmoptysis followed by bloody expectoration and of what variety? by black stools, etc.

immediate cause.

sensations preceding.

repetition.

sequelæ.

169. *Respiration:* — *Sense of dyspnœa:* its severity, sense of suffocation; constant or not? circumstances under which it occurs;—effect of posture upon it; variation with the times of day or night; effect of meals upon it, of exertion, of mental emotion.—Inability to hold the breath for a reasonable time; frequent arrests in the act of speaking to take breath.—Dyspnœa paroxysmal; time of occurrence of paroxysms; their duration;—appearance and posture of patient during them.—Acts of inspiration or expiration painful;—noisy; rattling; prolonged; wheezing; cooing;—inspiration crowing.—*Number* of respirations in a minute; their apparent fulness;—movement of alæ nasi during the acts, on both sides, or on one more than the other;—visible action of supplementary muscles of respiration.—Sensation experienced by patient of the air entering unequally on the two sides of the chest.

Respiration—dyspnœa.

respiration noisy.

number of respirations.

170. *Expired air:*—its temperature; its odor. —*Chemical examination* of it; the absolute and relative quantities of oxygen, nitrogen, carbonic acid, and watery vapor; presence of ammonia?

Expired air—

chemical examination.

*Results of Paracentesis Thoracis.*

### *Results of Paracentesis Thoracis.*

Operation.

171. *Operation:*—(particulars as *Paracentesis abdominis*, 145.)

Matters removed.

172. *Matters removed:*—(particulars as *Paracentesis abdominis*, 146.)

*Diaphragm.*

### *Diaphragm.*

Level—

173. *Level of diaphragm* (determined by inspection, fremitus, percussion, and Harrison's process).

pain, etc.

—*Pain* in course of diaphragm (particulars as 163).

hiccup.

—*Hiccup* (141).

movements.

—*Movements* of diaphragm, as estimated by movements of abdomen and lowest ribs.

§ IV. F.

## F.—ORGANS OF CIRCULATION.—BLOOD.

*Physical examination of Heart, etc.*

### *Physical examination of the Heart and Pericardium.*

Inspection—shape of cardiac region.

174. *Inspection:*—*Shape of cardiac region:* bulging or depression of second, third, fourth, and fifth left costal cartilages and ribs;—shape of adjoining part of sternum.—Condition of intercostal spaces as to widening, bulging, retraction.—*Visible pulsation:* its site and extent; visible point of apex beat;—undulatory pulsation; double pulsation, locality and time of;—force of pulsation as estimated by the eye;—effect of position and inspiration upon visible pulsation.

intercostal spaces. pulsation.

Measurement.

175. *Measurement:*—distance of left nipple from middle line; of upper edge of third left costal cartilage from upper edge of sixth, one inch outside sternum, (the above compared with analogous

measurements on right side;) of clavicle from heart's apex.

176. *Palpation:—Exact position of apex* of heart, during *impulse*, (noting the rib or interspace, and the relative position of the spot to the nipple, to the sternum, or to the ensiform cartilage;) effect of inspiration or expiration on seat of impulse; effect of change of posture on seat of impulse.—Characters of impulse; extent; strength; duration;—impulse given by apex only or by greater or less extent of heart's surface? its frequency; strength of impulse compared with arterial pulsation.—Back-stroke.—Rhythm of impulse; irregularity of impulse, of what kind?—*Thrill* and pericardiac-friction fremitus; its exact position; extent; amount; accompanying systole or diastole?—Vocal fremitus over and around præcordial region.

Palpation—seat of apex-beat.

characters of impulse.

back-stroke.

rhythm.

thrill, etc.

177. *Percussion:*—of præcordial space; its general characters as to clearness, dulness, etc.—Superficial dulness (determined by light percussion, during tranquil breathing); highest point of dulness; inner and outer limits; lowest point; shape of dulness;—measurements of dulness, vertical, oblique, and horizontal diameter.—Deep-seated dulness (determined by strong percussion on full expiration; particulars as *Superficial dulness*).—Effects of change of posture on results of percussion.

Percussion—

superficial.

deep-seated.

178. *Auscultation:—sounds*[1] (first and second), normal and abnormal, at second right and second left costal cartilages (for the sounds of the aortic and

Auscultation: sounds.

[1] The term "*sound*" refers only to the natural sounds of the heart, either normal or abnormal—*i. e.*, modified as to duration, pitch, or timbre.

pulmonary orifices respectively);—at third left costal cartilage, and adjoining part of sternum (for both aortic and pulmonary sounds);—at third interspace and along third rib for the distance of three inches from left edge of sternum (for all the sounds);—at point where apex beats (for mitral sounds);—at left of sternum and under ensiform cartilage, if apex be not in this position (for tricuspid sounds).—*Character of sounds:* their intensity; pitch; quality; duration; rhythm.—Reduplication of sounds, of first, of second.—*Murmurs:*[1]—locality and exact point of maximum intensity (See *Sounds*, supra);—intensity, absolute (estimated *per se*), relative (as compared with murmurs in other localities);—deep or superficial?—their special characters, blowing, rough, rasping, filing, humming, grazing, rubbing, creaking, musical.—Time of their occurrence; præ-systolic (occurring before first sound and impulse); systolic (coincident with first sound and impulse); post-systolic (continuing after first sound and impulse but before second sound); diastolic (coincident with or following second sound); continuous.—Rhythm of murmurs.—Transmission of murmurs (noting the exact direction).—Presumed origin of sound; endocardiac, pericardiac, or exocardiac.[2]

character of sounds.

murmurs.

[1] The term "*murmur*" is applied to an adventitious and superadded phenomenon, which may occur with one or more "sounds," or at their expense. Although a line between sounds and murmurs cannot always be perfectly drawn, this is no reason for abandoning a distinction of great importance, and one that is in most cases easily made.

[2] "*Exocardiac*"—i. e., a sound produced during the heart's action, but having a cause external to the heart and pericardium.

*General Cardiac Symptoms.*

*General Cardiac Symptoms.*

179. *Pain:*—locality; severity; characters; direction; constancy;—accompanied or not by dyspnœa?—how induced?—effect of posture upon it. —*Other abnormal sensations:* sinking; faintness; pressure; weight; drawing, dragging.—*Tenderness:* its locality, in interspaces or on ribs? by what amount of pressure caused?

Pain. other sensations. tenderness.

180. *Palpitation:* — severity; frequency; constancy;—circumstances giving rise to it, exertion, going up stairs or up hill, mental emotion, etc.

Palpitation.

*Arteries.*

*Arteries.*

181. *Inspection:*—Pulsation visible or not? characters of movements.

Inspection.

182. *Palpation:* — Pulsation; its frequency, strength; lateral impulse;—time as compared with that of heart's impulse.

Palpation.

183. *Auscultation:*—Sounds and murmurs, with and without pressure.

Auscultation.

184. *Radial pulse:*—number;—size and force; large, small, thready, equal, unequal, strong, feeble; —resistance; soft, compressible, hard, incompressible;—rhythm; regular, irregular, intermittent;—time as compared with that of heart's impulse;—artery tortuous.—Special characters of pulse; jerking, bounding, undulatory, continuous (one pulse appearing to run into the following), vibrating, quick, tardy, vermicular, tremulous, reduplicate.—Effects of posture on pulse (its number and other characters).—Phenomena of pulse in one arm as compared with the other.

Radial pulse: number. size, force. resistance. rhythm. special characters.

*Swellings connected with Arteries.*

*Swellings connected with Arteries.*

Inspection. 185. *Inspection:* — position of swelling; size, shape; pulsation.

Palpation—size, etc. 186. *Palpation:* — size of tumor; readiness of definition; form; surface; movableness; consistence, uniform or not? fluctuation: capable of being emptied or not by pressure of the hand (noting

pulsation. phenomena of return of blood)?—*Pulsation:* characters of pulsation, heaving, expansile, hammering, abrupt, etc.; force; time as compared with heart's impulse;—perceived only in front of tumor, or laterally also?—effect of displacement of tumor upon pulsation; effect of exercise or emotion upon it;—pulsation felt in a line along surface of tumor. —Effect of posture on the tumor and on its pulsation;—effect of pressure on proximal side of

thrill. tumor.—*Thrill:* perceived in front or laterally? with impulse or diastole of tumor, or both? continuous; during return of blood after compression.

diastolic shock. —*Diastolic shock.*

Measurement. 187. *Measurement of tumor:*—diameters; elevation, etc.

Percussion. 188. *Percussion:*—sound and resistance: size of part dull on percussion;—effect produced by pressure on proximal side of tumor.

Auscultation. 189. *Auscultation:* — sounds and murmurs; single, double, continuous;—their loudness; pitch; quality and special characters; presenting suction character.—Sounds and murmurs constant or not? effect of posture on them; effect of movement; effect of pressure on vessel; if near or in the thorax, effect of respiration on them:—period of sounds

and murmurs as compared with impulse of swelling and heart's impulse.

190. *Rupture of swelling:*—phenomena attending it;—alteration in the signs derived from inspection, palpation, measurement, percussion, and auscultation. (Vide *supra.*) — Rupture of swelling.

191. *Abnormal sensations:*—pain, seat, characters, intensity, direction, etc. (326); aching, its seat, etc.; tenderness; throbbing; tension. — Abnormal sensations.

*Veins.* — *Veins.*

192. *Inspection* (on thorax, abdomen, neck, upper and lower extremities, etc.):—size; course; tortuosity; apparent connection with deep veins;—direction of flow of blood in enlarged veins.—Visible pulsation (noting in which vein or veins); degree and characters; cardiac or respiratory? its time as compared with heart's impulse;—influence of posture, exercise, emotion, respiration, coughing, etc. upon it. — Inspection—size, etc. — visible pulsation.

193. *Palpation:*—hardness of veins (noting seat and extent of this and other phenomena), thickening, cording, etc.; pulsation; thrill. — Palpation.

194. *Auscultation:*—murmurs; their characters; rhythm; influence of position, pressure, respiration, heart's action, etc. upon them. — Auscultation.

195. *Condition of skin over veins:*—redness, etc. — Skin over veins.

*Swellings connected with Veins.* — *Swellings connected with Veins.*

196. *Physical examination:*—Position; shape; size;—thrill;—results of percussion and auscultation. — Physical examination.



This book is the p
COOPER MEDICAL

Abnormal sensations.

197. *Abnormal sensations, etc.:*—pain, its characters; tenderness, etc.

*Blood.*

*Blood.*

Phlebotomy or arteriotomy—period of day. pulse. posture. vessel. flow.

198. *Phlebotomy or arteriotomy:*—Period of day when blood is drawn; its relation to meals.—State of pulse before bleeding.—Posture of patient during operation; position of limb or part.—Name of vessel; any peculiarity connected with it? size of incision.—*Flow of the blood* (noting and comparing particulars at different periods of the bleeding, and at its close): facility of the flow; force; volume; rhythm; height;—color of blood as it streams, natural, black, violet, bluish, whitish, reddish, scarlet, variegated;—its fluidity;—its temperature (taken near the orifice, that of the atmosphere being observed at the same time);—its odor (with or without addition of sulphuric acid).—*Quantity of blood drawn:* time occupied in obtaining it.—*Condition of patient:* during and immediately after bleeding; especially as regards changes in pulse, state of skin, intellect (syncope, delirium), etc.

quantity drawn. effects.

Characters of blood.

199. *Characters of blood* drawn:—description of vessel into which blood has been received.—*Process of coagulation:* blood completely or partially coagulated; time of commencement and completion of process; appearances attending it;—accidental occurrences which may affect it, temperature, exposure to air, etc.—*The clot:* position in respect of vessel, in respect of serum; size; form, round, ovoid, flat, cupped, etc.; color, mottled, etc.; aeration; cohesion, etc.;—buffy coat or siziness, its color, thickness; proportion to entire clot; surface (smooth, granulated); cohesion; degree of cupping.

coagulation.

clot.

—*The serum:* color; transparency (if milky, note effect of ether upon it); viscidity; specific gravity; chemical reaction. — serum.

200. *Microscopical examination of blood:*—of drop of blood *taken from finger of patient;* period of day when taken; time of last meal.—Elements observed;—movements of red corpuscles, time of running together into rouleaux, length of rouleaux, duration of aggregation; — relative numbers of white and red corpuscles;—effect of agents on microscopic elements.—Of blood *drawn from a vein* and coagulated; examination of clot, buff, and serum. — Microscopical examination: from finger. — from vein.

201. *Chemical examination of blood:*—proportion of each of normal elements;—examination of serum for presence of sugar, urea, uric acid, ammonia, etc. — Chemical examination.

## G.—LYMPHATIC SYSTEM. — § IV. G.

202. *Lymphatic vessels* (noting locality and extent of all observed phenomena):—hardness; enlargement; — tenderness; pain. — Redness or other discoloration over them, occurring in patches, along line of superficial lymphatic vessels (noting exact course, and whether linear or blotch-like in form);—œdema or abscess of adjacent cellular tissue. — Vessels.

203. *Lymphatic glands* (noting situation of glands affected):—size; form; readiness of circumscription; surface; induration, general or partial, its degree; softening; fluctuation;—pain, tenderness, etc.—Cicatrices over seat of glands (76). — Glands.

§ IV. H.

## H.—URINARY ORGANS.—URINE.

*Physical examination of Kidneys, etc.*

### *Physical examination of the Kidneys, Suprarenal Capsule, and Ureters.*

Inspection.

204. *Inspection* (in postero-lumbar, lateral lumbar, and antero-lumbar regions).—Fulness; œdema of integuments; redness; fistulæ, etc.

Palpation.

205. *Palpation:* — temperature of surface in renal regions.—Tumor; its size; state of surface, even or nodulated? size of nodulations (their uniformity); firmness of tumor; fluctuation, readiness of its perception;—presence of yielding portion in front of tumor?—(further particulars as *Abdominal tumors* (130).)—Movableness of kidney discoverable anteriorly.—Swelling in course of *ureter;* effect of pressure upon it; its movableness.

Measurement.

206. *Measurement:* — vertical from antero-superior spine of ilium to lowest rib; semicircular; antero-posterior (with callipers).

Percussion.

207. *Percussion* (after defining previously, if possible, the limits of liver and spleen):—extent of dulness anteriorly; how connected with that of liver and spleen? extent of dulness posteriorly; transverse dulness (measured).—Intestinal note anteriorly to tumor; course of line of intestinal note, transverse, vertical, irregular; (further particulars as *Abdominal tumors,* (131.))

Auscultation.

208. *Auscultation* (with pressure or percussion): —sound of collision of calculi; (further particulars as *Abdominal tumors,* 132.)

*Physical examination of Bladder and Prostate Gland.*

*Physical examination of Bladder, etc.*

209. *Physical examination of hypogastric region:* — fulness; tension.—Palpable tumor; its form, size, consistence, fluctuation;—effect of catheterism upon it.—Form of distension as established by percussion.—Auscultation combined with use of sound; audible collision of sound against a calculus, against a tumor; (further particulars as *Abdominal tumors*, p. 59.)

Hypogastric region— inspection. palpation. percussion. auscultation.

210. *Examination through rectum:* — size of prostate gland, etc.

By rectum— prostate.

211. *Examination through vagina* (231).

By vagina.

212. *Catheterism:*—direction of prostatic part of urethra; calculus felt in bladder, etc.;—effect of catheterism on physical signs.

Catheterism.

*Physical examination of Urethra.*

*Physical examination of Urethra.*

213. *Inspection:* — vegetations at *orifice;*— vascular tumors; number, seat, tenderness, etc.— *Discharge from urethra:* abundance, circumstances influencing it;—physical characters, color, consistence, odor; coagulability;—duration of discharge;—results of inoculation with discharge (in evidence of chancre within urethra).—*Stains upon linen:* abundance; size; precise form; precise tint; stiffness or pliability;—results of steeping in distilled water and microscopical examination.

Inspection. orifice. discharge. stains on linen.

214. *Palpation* (in course of urethra):—swelling; hardness; knottiness, etc.

Palpation.

215. *Catheterism:* — length and direction of urethra (determination of this and of thickness of

Catheterism:

strictures.

urethra and tissues about it assisted by finger in vagina or rectum.—*Strictures:* number; situation; closeness of stricture; hardness of walls;—effects of stricture upon micturition and ejaculation of semen.

*General Symptoms.*

*General Symptoms referable to the Urinary Organs.*

Pain—seat.

severity.

circumstances affecting it.

accompanying phenomena.

other sensations.

216. *Pain:*—in renal regions; in direction and course of ureters; in region of bladder; in course of urethra; at extremity of penis.—Its severity; constancy, if paroxysmal, state period, frequency, and duration of attacks;—circumstances under which it occurs; after walking, riding, jolting, etc.; effect of different kinds of food or drink upon it;—its precise seat and extent? if in renal region, on one or both sides?—its direction;—accompanying phenomena; faintness, sickness, sweating, etc.;—special character of pain.—*Other abnormal sensations:* fulness; tension; itching at extremity of urethra, etc.

Tenderness.

217. *Tenderness* (in renal and hypogastric regions, and in course of urethra):—superficial or deep-seated? its amount; limited to spot touched, or radiating elsewhere?

Micturition—desire. frequency.

stream.

pain.

stillicidium.

218. *Micturition:*—desire to pass urine or not? its frequency, its urgency.—Frequency of micturition; facility of micturition, effect of posture upon it;—stream of urine, interrupted, in drops, forked, spiral.—Painful micturition; pain preceding, accompanying, or following the act; characters of pain; constancy; duration; seat.—Stillicidium urinæ; constant or occasional? urine passed into bed at night, from what cause?

219. *Hæmaturia:*—quantity of blood passed; frequency of occurrence;—circumstances giving rise to it, walking, jolting, etc.;—blood passed at commencement or close of micturition, or mixed generally with urine?—blood fluid or coagulated? form of coagula, lumpy, vermicular; color of blood or of urine containing it.—Phenomena preceding the discharge.

Hæmaturia—quantity. circumstances affecting. characters of blood. phenomena preceding.

*Urine.*

*Urine.*

220. *Quantity of urine* (in ounces), in course of day and night;—relation of this to the quantity of liquid drunk.

Quantity.

221. *Characters of urine* (in important cases, separate examinations should be made at different periods of the twenty-four hours, before and after meals, etc.);—transparency:—color; pale, yellow, greenish, tinged with blood, smoky, etc.; odor: urinous, whey-like, sweet, broomy, strongly acid, ammoniacal, fishy, musty, etc.;—specific gravity (noting temperature) before deposit; after deposit; after ebullition;—its reaction; acid, neutral, alkaline (from volatile or fixed alkali?).—Spontaneous coagulation; size, color, and consistence of coagulum.—Pellicle, iridescence;—cloud;—deposit; its position, proportion to entire specimen of urine, density, color; special physical character of deposit, flocculent, cottony, fleecy, ropy, catarrhal, sandy, solid.—Foreign substances in urine; milk, feces, ink, worms (acephalocysts, dactylius aculeatus, strongylus gigas), etc.—Changes in urine on standing for several hours, days, or weeks.

Characters—appearance. odor. specific gravity. reaction. coagulation. pellicle. deposit. foreign substances.

222. *Microscopical examination of urine* (645 *et seq.*):—saline matters; lithic acid, lithate of

Microscopical examination: saline matters

ammonia and soda, oxalate of lime, phosphates (amorphous and crystalline), cystine, etc. (note form of crystals, etc., their abundance in urine generally and in deposit, and effects of reagents upon them);

animal matters. —animal matters; blood-disks, mucus, epithelium, albuminous shreds (connected or not with salts?), pus, pyoid corpuscles, cancer-cells, etc., portions of acephalocysts, spermatozoa (living or dead?), vibriones, hairs (accidental or from pilimiction?), etc.

Chemical examination. 223. *Chemical examination of urine:*—rough estimate of quantity of urea and albumen;—ascertain qualitatively the presence of sugar, biliary or coloring matter.—(In analysis specially ascertain proportion of principal constituents of urine, uric acid, urea, phosphates, etc., and the actual quantity of each passed in twenty-four hours.)—"Examination for arsenic, etc., in cases of suspected poisoning."

§ IV. I. ## I.—ORGANS OF GENERATION.

### 1. FEMALE.

*Pudendum.* ### *Pudendum.*

Labia, etc.—swelling. ulcers, etc. tumors. discharge, etc. fourchette. 224. *Labia, Nymphæ, and Clitoris:*—enlargement; swelling hard, soft, fluctuating, œdematous; color; degree of vascular injection;—excoriation, its seat, extent, etc.; ulcers (624); cicatrices (629); —vegetations; condylomata, elevated or flat;—tumors, their exact seat, size, form, color of surface, consistence, fluctuation, movableness, disappearing or not on lying down?—Discharge; amount, odor, and other characters;—other matters about external genitals, blood, etc.—Fourchette lax or torn.

225. *Abnormal sensations:*—pain, itching, tenderness, etc. — Sensations.

226. *Urethral orifice:*—its prominence; thickening of tissues around it; its color; sensibility.—Growths within and about it, warts, vascular tumors, etc. (their number, exact seat, size, and other characters).—Displacement of urethral orifice. — Urethral orifice—appearance. growths. displacement.

227. *Hymen:*—absent or present? its precise state, "surrounding the entire vaginal orifice, or only a part of it?" imperforate; "its strength." — Hymen—presence. characters.

228. *Protrusion from vulva externally:*—number of protrusions; amount; form;—condition of surface of protrusion; color; presenting appearance of os uteri upon it, etc.—Effect of posture or catheterism on protrusion.—Palpation of protrusion;—distinguished as uterus by its form, size of uterus;—protrusion soft, elastic, fluctuating.—Percussion of protrusion, resonant, dull. — Protrusion from vulva: inspection. palpation. percussion.

*Examination by the touch, through the Vagina.* — *Examination by Vagina.*

229. *Vagina:*—orifice, its size; contracted by muscles; surrounded by swollen mucous membrane;—direction of vagina in relation to pelvis; length; breadth; narrowing of any part, its exact seat and degree, its apparent cause; complete closure of canal, its seat;—mode of termination of vagina.—Mucous membrane: smooth, velvety, rough, corrugated, swollen, or thickened; presenting puckering, frœna, vegetations, etc. (their seat, etc.).—Pulsation of arteries perceptible or not? generally or limited (to what part)?—Tension, hardness, or resistance to pressure at any part of the wall?—Ruptures, into rectum, into bladder; — other abnormal openings, their seat, communication with — Vagina—orifice. direction. size. closure. termination. mucous membrane. pulsation of arteries. resistance. ruptures, etc.

tumors.

contents.
clot.
polypus.
foreign substances.

felt tumors;—nature of matters discharged from the openings, hair, portions of fœtal substance, bones, etc.—Tumors attached to wall of vagina; their position, size, form, etc.; sessile or pedunculated? their sensibility.—Contents of vagina; a clot; a polypus, its size, shape, consistence, sensibility, etc., traced to os uteri (232); foreign substances in vagina (pessaries, etc.).

Urethra.

230. *Urethra:* — thickening in its course, its extent, hardness, etc. (judgment assisted by simultaneous use of catheter).

Bladder—distension.

tumor.

231. *Bladder:*—distended; protruding anterior vaginal wall; fluctuation felt on impulse over supra-pubic region; effects of pressure in supra-pubic region on tumor; effect of catheterism, of efforts at micturition.—Hard tumor about situation of base of bladder; its form, irregularity, extent, mobility, etc.

Uterus—neck.

232. *Uterus.—Neck:* its position, elevated, depressed (amount of each), displaced towards either side of pelvis, forwards or backwards;—axis altered in direction, placed horizontally (partially or completely?); os uteri directed forwards, backwards, or to either side;—neck of uterus shortened, lost (note mode of termination of vagina), elongated; increased in breadth; altogether smaller than usual; —consistence, soft, cushiony, hard;—covered with transverse folds of mucous membrane; irregularities or elevations on its surface;—pulsation of arteries on its surface;—ulceration (624);—extent to which neck has been destroyed;—tumors, their extension in direction of body of uterus or towards other organs; —adhesion of neck of uterus, at what part?—Tenderness.—*Lips of uterus:* natural; of ringlike form; hard; soft; irregular; enlarged (stating which lip);

lips.

flat; everted; thinned; smooth; lobulated (in two, three, or more lobules?); excavated, etc.—*Orifice of uterus:* incapable of being reached, from what cause? direction in which it points; its shape, natural, oval, rounded, irregular, excavated; elevated on one side; closed;—open, degree of openness (admitting one or more fingers);—obstructed, nature of obstruction (if ascertainable);—tumor projecting through orifice; its extent (229), narrowing of tumor opposite orifice, attachment of tumor to any part of orifice, or readiness with which finger can be passed round its neck.—*Body of uterus:* position; apparent size (amount of enlargement of organ above the cervix); is the enlarged part anterior or posterior to cervix, or is the enlargement in all directions?—form of enlargement; lobulation or other irregularities of surface;—consistence, hard, soft, fluctuating;—apparent weight of uterus; —fixity of uterus.—Repercussion (ballottement). —Presenting part of a fœtus perceptible.—An angle perceived between neck and body of uterus; anteriorly, posteriorly, laterally.—Results of introduction of finger into *cavity of uterus;* escape of gas, of fluid matters (their characters);—solid substance felt within it; polypus, its point of attachment (by a neck, by an extended surface), its size, form, consistence, degree of sensibility; characters of substance, if any is brought away by the finger.

orifice.

body.

repercussion.

cavity.

polypus.

233. *Tumor felt through wall of vagina* (this includes the examination of the *Ovaries* and *Fallopian tubes*):—exact position in regard to vagina, pelvic viscera, and pelvis; anteriorly (superiorly or inferiorly?), posteriorly (superiorly or inferiorly?), laterally;—size; extent of pelvic cavity occupied by it;—form, cylindrical, rounded, irregular, etc.;—

Tumor—

seat.

form.

consistence. surface; smooth, irregular, nodulated (equally or unequally?);—consistence; hard, soft, elastic, impressible, fluctuating; giving the idea of limbs or

connections. other parts of a fœtus;—its connection with known organs, as uterus, bladder, or rectum;—effects of

mobility. straining or labor-pains on its position or tension;—

tenderness. mobility or fixedness of tumor.—Tenderness.

*Examination by Vagina and Abdominal Wall.*

*Examination through the Vagina and Abdominal Wall conjoined.*

Continuity of tumor. 234. *Continuity and connection* or otherwise of organs and tumors felt through vagina, with others felt above brim of pelvis;—transmission of impulse or fluctuation from one to the other; elevation of the one accompanied or not by elevation of the other?—descent or not of pelvic tumor on

size of tumor. pressing downwards abdominal tumor?—Size of mass felt between two hands.—Effect of elevation of abdominal tumor upon the position or mobility of pelvic organs or tumor.

*Examination by Rectum.*

*Examination by the touch, through the Rectum.*

Introduction of finger— 235. *Introduction of finger:*—facility with which permitted; passage of finger along canal opposed, by accumulated fecal matter, by foreign bodies, by compression from tumor externally, by stricture; closeness of stricture; extent to which finger

of bougie. can pass.—Introduction of bougie. (See also 126.)

Uterus. 236. *Uterus:*—position; size, form, etc., of such parts as can be reached; mobility;—its fundus, form, relation in position to pelvic tumors, etc.—

Ovaries and Fallopian tubes. *Ovaries and Fallopian tubes* (if capable of being recognized):—position; mobility; size; form;

condition of surface; consistence; pulsation of arteries; tenderness, etc.

237. *Bladder:*—its relation in position to fundus of uterus and pelvic tumors. Bladder.

238. *Tumor:*—its position, relatively to rectum and pelvis; its characters (particulars as 233). Tumor.

*Examination through the Rectum and Abdominal Wall conjoined.* *Examination by Rectum and Abdominal Wall.*

239. (Particulars as 234.)

*Examination through the Rectum and Vagina conjoined.* *Examination by Rectum and Vagina.*

240. *Thickness* of substance between the fingers; tumor, its size and characters (233, 23[illegible]); fluctuation, etc.

*Examination by the Uterine Sound.* *Examination by Uterine Sound.*

241. *Introduction of sound:*—facility with which effected; pain on introduction; escape of blood.—*Uterine cavity:* its length; direction, presenting angular flexion, direction in relation to tumors of the pelvis or abdomen.—Can the extremity of the sound be felt anywhere through the abdominal parietes, vagina, or rectum?—Thickness of intervening substance. Introduction: uterine cavity. thickness of wall.

242. *Movableness* of uterus by means of the sound:—is it capable of being moved independently of pelvic or abdominal tumor?—can abdominal tumor be moved while uterus is fixed by the sound?—does movement of abdominal tumor oc- Movableness of uterus.

casion a corresponding movement of handle of sound?

*Examination by Speculum.*

### *Examination by the Speculum.*

Introduction.

243. *Introduction of speculum* (stating kind of instrument used):—facility of introduction; pain on introduction.

Vagina—surface.

244. *Vagina:*—its color; surface, smooth, velvety, rough, corrugated; —excoriations; ulcers (624); cicatrices (629); vegetations; tumors (631).

openings.

—Abnormal openings: their situation; form, etc.;—

secretions.

character of matters passing through them.—Secretion on surface of mucous membrane; abundance, characters (249).

Orifice of uterus.

245. *Orifice of uterus:*—natural; open; distended from glairy or gelatinous mucus, tumors, etc.; size; form, rounded, irregular, etc.; —discharge emerging from orifice or covering its lips, its characters.

Lips and neck of uterus—size, form, color.

246. *Lips and neck of uterus:*—their size; lips flat, uneven, everted, lobulated (size and characters of lobulations); their color, bright, livid, dusky red, etc.;—raw appearance around orifice of uterus (extending or not into cervical canal?); its form, size, exact situation, elevation or depression from

surface.

level of surface generally? mammillation of its surface, etc.;—excoriations; ulcerations (624), etc.

*General Symptoms.*

### *General Symptoms referable to the Female Generative Organs.*

Catamenia—periods. duration. quantity.

247. *Catamenia:*—periods of their recurrence; duration of discharge (in days or hours); discharge continuous or intermittent?—quantity of discharge

natural to the individual, scanty, very abundant. —Phenomena of flow; occurring suddenly at catamenial period; on excitement; at irregular periods; —accompanied or not by pain, from first appearance or from what date? occurring before or after the flow? trifling or severe? its exact seat, character, duration.—*Physical characters of fluid:* color; consistence; odor; accompanied or not by clots?—*Catamenia entirely suppressed:* for what period?

flow.

pain.

quality.

suppression.

248. *Hemorrhage:*—frequency; periods of occurrence;—circumstances inducing it, fatigue, long-standing, heated apartments, etc.;—its abundance;—relief afforded by it to uneasy or painful sensations.

Hemorrhage: periods. causes. quantities, etc.

249. *Liquid discharge from vagina:*—amount; constant or intermittent? periods of its occurrence; gradual or in a gush?—*Characters of discharge:* transparent; opaque; its color, white, yellow, pink, greenish; streaked with blood;—its consistence, watery, thin, glairy or viscid, stringy; —its special characters, puriform, curdy, like white of egg or jelly, bloody; mixed with urine or feces;—containing organic detritus, tuberculous or calcareous matter, cancerous matter, etc.;—stains produced by it upon linen; their color, etc. —*Microscopical characters* of discharge (645 *et seq.*); specially, spermatozoa, urinary or other crystals.—*Chemical characters* of discharge.

Liquid discharges—circumstances. characters.

microscopical characters.

chemical characters.

250. *Discharge of gas from vagina:*—frequency of discharge; circumstances under which it occurs, spontaneously or during vaginal examination? accompanied or not by sound? apparent quantity of gas discharged; its odor.

Discharge of gas.

251. *Solid or organized masses discharged from vagina:*—circumstances of their expulsion;

Solid discharges.

—their nature, an ovum (its degree of development), a coagulum, fibrous or calcareous matter, a mole (their anatomical characters), hydatids, etc.

Pain in vagina: circumstances. characters.

252. *Pain in vagina:*—circumstances under which it occurs; its characters, lancinating, shooting, throbbing, burning, etc.; sense of swelling or distension;—difficulty or pain in walking; tenderness on sitting down.

Uterine pain: circumstances. characters. direction.

253. *Uterine pain:*—circumstances under which it occurs; its special characters, continuous, paroxysmal, shooting, expulsive, bearing-down, etc.; its extent; direction.

Itching.

254. *Itching:*—seat, external or internal; severity; circumstances under which it occurs.

Sexual intercourse.

255. *Sexual intercourse:*—disgust of.—Intercourse imperfect from physical obstacle; painful, seat of pain;—followed by discharge of blood, by weight about anus, by hysterical fits, etc.

*Mammæ.*

*Mammæ.*

Physical examination: form. surface.

256. *Physical examination of mammæ:*—their form; size, equal or unequal, affected or not by catamenial period? surface, its smoothness, color;—silvery lines or other visible marks of previous

nipple.

enlargement; condition of veins.—*Nipple:* color; degree of fulness and turgidity; flattened or drawn in, amount of puckering inwards; dryness or moisture of surface; discharge from it; excoriations; ul-

areola.

cers (462), etc.—*Areola:* size; color; moisture;—follicles, their size, position, and color;—firmness or

substance.

softness of skin.—*Substance of gland:* knotty; its mobility;—fulness or hardness of lymphatic vessels, of axillary or supra-clavicular glands;—

tumor.

tenderness.—*Tumor:* precise seat; form; surface;

solidity; elasticity; adherent to skin or to deep parts; tender; painful after examination.—*Ulceration:* its situation, size, and precise characters (624). ulcer.

257. *Pain in breast:*—its characters, aching, throbbing, like a weight, lancinating, etc.; limited to breast or radiating elsewhere;—influence of catamenial periods upon it. Pain.

## 2. MALE.[1]

258. *Scrotum:*—anasarca; eruptions (77 *et seq.*); hernia, etc. Scrotum.

259. *Testicles:*—absent from scrotum; very small; enlarged (one or both?), character of enlargement; mobility.—Pain; constant or occasional? its character;—tenderness. Testicles.

260. *Penis:*—unusually small; enlarged, cause and character of enlargement; enlargement of corpora cavernosa; hardness of corpus spongiosum;—condition of urethra (213 *et seq.*); tenderness, its seat. Penis.

261. *Spermatorrhœa:*—its frequency; amount; erotic or not? nocturnal or diurnal? induced by defecation; influenced by temperature, by state of bowels, by anxiety of mind, by sexual excitement;—immediate sequelæ of discharge, headache (occipital or otherwise), constipation, failure of sight, confusion of thought, insomnia or drowsiness, lumbar pain, etc. Spermatorrhœa.

[1] Such points alone are here noted as have especial reference to medical cases.

§ IV. K.

## K.—ENCEPHALON AND ITS COVERINGS AND APPENDAGES.

*Cranium, etc.*

### *Examination of Cranium, etc.*

Cranium—form. symmetry. measurement.

262. *Cranium:*—general form, conical, lozenge-shaped, etc.;—form of frontal, parietal, and occipital regions;—prominence; flattening;—symmetry of the two sides;—special depressions or eminences, from injury, etc.—Its size; height, length, breadth.—*Measurement:* circular (over superciliary ridges and occipital protuberance), compared with circumference of neck;—across vertex (from ear to ear), along middle line (from root of nose to occipital protuberance).—*Cranial bones:* their apparent thickness; fixed or loose.—*Fontanelles:* prominent or depressed? tense; fluctuating; pulsating; relation of pulsation to heart's systole and to respiratory acts.

bones. fontanelles.

Integuments: temperature, etc. ecchymosis. wounds, etc. hair.

263. *Integuments, etc.*—Temperature, compared in different parts; color; fulness of vessels; pulsation.—Ecchymosis, with or without swelling?—Wounds (626); abrasions; ulcers (624); eruptions (77 *et seq.*).—Hair; its arrangement, erect, flat or depressed? disordered;—rubbed off certain parts.

Tumors—seat. mobility. consistence. characters.

264. *Tumors:*—number; precise seat, over sutures, fontanelles, bone; size; pedunculated or sessile? mobility; fixity to skull; consistence; elasticity; fluctuation;—if perforating skull, note state of edges of opening, smooth or rough, sur-

rounded or not by an elevated rim;[1]—tumor diminished in size or reducible by steady pressure; pressure productive of cerebral symptoms;—tumor erectile, pulsating (effect of pressure on carotid on these phenomena).—Murmurs audible over tumor, arterial, venous.—Precise condition of integument over tumor, its color; œdema.—Pain; tenderness, etc.

murmurs.

integument over.

pain.

265. *Auscultation* in course of sinuses, especially over torcular Herophili; venous hum.

Auscultation.

*Alterations of Sensibility.*

*Sensibility.*

266. *Pain in the head*:—complained of verbally, indicated by patient putting hand to head or otherwise?—antecedents of pain, a fall, a blow, a strain of any kind, dietetic irregularities, unusual intellectual work, moral excitement, sexual excesses, etc.;—precise seat of pain; symmetry (hemicranial?);—character of pain, sense of weight, throbbing pain, expansile, bursting, lancinating; deep-seated or superficial? its intensity; sense of intense heat; characters changeable or not?—accompanied or not by undue carotid pulsation? by sense of sickness or vomiting?—Affected by pressure, by light or sound; by movement of muscles of face of scalp; by movement of head or body; by respiration, by deep inspiration or deep expiration; by posture; by muscular effort, coughing, etc.; by pressure on carotid arteries, one or both; by stimulants.—Time when pain most felt, in

Pain in head: how indicated.

antecedents.

seat.

characters.

accompaniments.

circumstances affecting.

time.

[1] This "*elevated rim*" may exist without perforation, as in sub-pericranial cephalhæmatoma and in collections of blood in the adult, producing a deceptive sensation of perforation.

morning, evening, on waking, after eating, etc.

duration. —Duration of pain, its constancy; periodicity.—

other pains. Connected or not with neuralgic or rheumatic pains elsewhere?

Sensibility of skin— 267. *Altered sensibility of skin:*—(note precise locality of altered sensibility, whether it is symmetrical or not; course pursued by it, upwards,

increased. downwards, or irregularly).—*Sensibility increased:* degree of increase, stating how judged of; to pinching, to gentle friction, to touch; (endeavor to distinguish between acuteness of touch, or hyperæsthesia, and augmented sensibility to pain,

diminished. or hyperalgesia.)—*Sensibility diminished:* degree of diminution (stating how judged of); results of application of Weber's test, with points of compasses placed parallel with axis of part or transversely? objects appearing separated from skin by some intervening substance; inability to distinguish form and character of surface of objects by the touch; unconsciousness of contact of bodies; (endeavor to distinguish between diminution or loss of touch, or anæsthesia, and diminished or abolished sensibility to pain, or analgesia;) total abolition of all

perverted. sensibility.—*Sensibility perverted:* sense of heat or of cold (compare with indication of thermometer);—numbness; formication; prickling; tingling; itching, referred to surface, subcutaneous parts, or deeper in limb;—aura.

Muscular sense. 268. *Muscular sense:* diminished or lost; patient unconscious of position of limbs; inability to perform or continue muscular acts without concentrating attention upon them.

Other sensations. 269. *Other alterations of sensibility:*—pain in back, limbs, etc.; precise locality of pain, its character; circumstances influencing it; pain affect-

ing course of special nerves (326); affecting muscles (87), bones (84), or joints (83).—(See also 59.)

*Alterations of Motility.* — *Motility.*

270. *Attitude:—in erect posture;* unsteadiness on centre of gravity, with eyes shut or open successively.—Attitude *in decumbency* (57): tendency to turn on one side, to turn round and round.—Attitude *in sitting posture* (57).—Attitude *during progression;* walk, staggering or faltering;—patient compelled to adopt a running pace;—tendency to fall, from what cause (vertigo, not feeling the ground, weakness of either or both limbs)?—tendency to go irresistibly forwards, backwards, sideways, diagonally, to turn round and round.—Attitude of head in each posture (57).

Attitude—in erect posture. decumbency. sitting. in progression. carriage of head.

271. *General muscular agitation,* or excitement of voluntary muscles: intermittent or continual? automatic or delirious?—*Tremblings:* their site; occurring in all or in certain postures? persistence during sleep.—*Muscular twitchings:* in face, extremities, etc.; subsultus tendinum; carphology.—*Unsteadiness of limbs* when raised up.

Muscular agitation— tremblings. twitchings. unsteadiness.

272. *Automatic movements:*[1]—limbs or parts of body affected; unilateral or bilateral? affecting special muscles of tongue, pharynx, eyeball, etc.;—degree or violence of movements; character of movements; their constancy or variation;—influence of sleep upon them, of irritation, of mental excitement, of sensory impressions (tactile or special), of directing attention to them.

Automatic movements—seat. circumstances affecting.

[1] Under "*automatic movements,*" are here included the kinds of movement recognized as "choreal."

Slow extension and flexion.

273. *Slow movements of extension or of flexion* of limbs without apparent object.

Power of direction.

274. *Power of directing movements* of upper or lower limbs, lost or impaired; how indicated?

Rigidity.

275. *Rigidity:* with extension or with flexion of limbs? angle of flexion at which it is perceived; rigidity affecting other parts; its degree;—persistent; alternating with relaxation.

Spasmodic contractions.

276. *Spasmodic contractions:*—trismal; tetanic (emprosthotonos, opisthotonos, pleurosthotonos); their duration and intervals;—spontaneous or excited by movements, by nervous impressions (as a start), by being touched; periodical.

Convulsion—

antecedents.

277. *Convulsion:*—constant or occasional? intervals of recurrence; periodicity;—induced by sight or sound of liquids, etc.—*Antecedents* of seizure: dazzling before eyes; sudden failure of sight; fixing of eyes; dilatation of pupils; globus; aura; peculiar cry; fall, etc.;—time which elapses between these phenomena and seizure.—*Phenomena*

seizure.

*of seizure:* site of convulsions; on one or both sides? alteration in features; amount of convulsion; duration of attack;—tendency chiefly to rapid jerking movements, to rigid flexions, to rigid extensions;—accompanied by foaming at the mouth, by biting the tongue, by vomiting, by ejection of feces, urine, or semen, by a tendency to bite, by a dread of liquids and shining bodies;—direction of axes of eyes during seizure;—state of consciousness, perfect, impaired, abolished;—state of skin, as to color, temperature, and perspiration; state of pupils (322), pulse (184), and respiration (169); heart's sounds (178), and impulse (176).—Evidence of occurrence of convulsions during sleep;

sequences.

—influence of the will upon them.—*Sequences* of

attack: sleep, comatose state, perspirations, discharge of urine, etc.;—recollection of attack by the patient.

278. *Other reflex phenomena:* — strabismus (322); rolling of eyes; cramps (87); grinding of teeth; jerking or kicking movements of limbs, time when chiefly observed, painful or not? priapism, etc.—Mode of exciting any of these phenomena;—time of their occurrence;—condition of sensation in limb generally at the time of their excitement, impaired, or totally absent (267);—concomitant deviation of spine.

Other reflex acts—

how excited.

accompaniments.

279. *Cataleptic immobility:*—parts affected; its degree; frequency and duration of seizures.

Cataleptic immobility.

280. *Paralysis:*—

Paralysis—

*Affecting the limbs:* how judged of?—its exact site; affecting flexors or extensors solely or principally? affecting special muscles;—accompanied or not by twitchings of the paralyzed muscles?—progressing upwards or downwards?—perfect or imperfect in degree? constant or variable? compared upon the two sides and in upper and lower extremities.—Bulk of limbs estimated by measuring their circumference; nutrition of paralyzed limbs and muscles estimated by the feel;—temperature of paralyzed compared with non-paralyzed limb.

limbs.

*Affecting the thorax and abdomen:* rhythm of respiration; — expansion during inspiration, measured on both sides;—tendency of fluid to accumulate in bronchi, etc.

thorax and abdomen.

*Affecting the face:* any peculiarity of expression? comparison of the two sides, condition of wrinkles on the two sides; effect of laughing

face.

or smiling on the two halves.—Comparison of position of pinnæ of ears; of halves of occipito-frontalis, symmetry of wrinkling on the two sides during frowning or elevation of eyebrows;—comparison of height of eyebrows; degree to which eyelids are apart, ptosis, lagophthalmia;—course of tears;—size of aperture of nares, flapping of nares on either side;—condition of cheeks and lips, comparison of commissures of mouth, note manner of whistling, of blowing out cheeks, etc.; accumulation of food behind teeth.

tongue. *Affecting the tongue:* deviation of tongue, its direction, amount, constancy;—alteration in form of tongue; wasting of either side;—induration or rigidity of either side; twitching of either side.—*Articulation:* thick, confused (noting class of consonants most difficult of pronunciation), mumbling, unintelligible, jerking, stammering.

articulation.

deglutition. *Affecting the muscles of deglutition:* state of deglutition; stage of act at which difficulty is experienced (106);—abnormality in position of larynx, etc., visible externally, in respect to median line.

stomach. *Affecting the stomach:* facility of vomiting (138).

rectum. *Affecting the rectum:* feces retained, accumulating.

anus. *Affecting the anus:* stools involuntary;—paralysis accompanied by local loss of sensation; feces felt on arriving outside anus, etc. (142).

bladder. *Affecting the bladder:* retention of urine; stillicidium urinæ (218).

larynx. *Affecting larynx:* aphonia (156).

Muscular irritability—how tested. 281. *Muscular irritability* compared in paralyzed and non-paralyzed parts: as tested by percussion;

as tested by galvanic current (stating force of pile and kind of instrument used), with current direct, reversed, continuous, or interrupted.

*Symptoms referable to the Intellectual and Moral Faculties.*[1]

*Intellectual and Moral Faculties.*

282. *Consciousness:*—impaired; indifference; dreaminess; hebetude; stolidity; doziness, readiness with which patient is roused; patient, after being roused, relapsing immediately, or after an interval of longer or shorter duration? stupor; somnolence; coma; coma-vigil.—Consciousness abolished; abolition gradual or of sudden occurrence? duration of loss of consciousness; posture and occupation of patient when it occurred; phenomena attending it.

Consciousness—impaired. degree of. abolished. circumstances of abolition.

283. *Sleep:*—deficient (peculiarities of the deficiency—*e. g.*, patient a long time going to sleep, waking after a short sleep, and then not sleeping any more, etc.); totally absent, patient feeling the want of sleep or not? exhausted by it or not? interrupted by sudden wakings with affright; unduly protracted.—Soundness of sleep; amount of refreshment experienced.—Sleepiness at improper times, especially on sitting down or after meals.—Snoring during sleep.—Posture in which patient goes to sleep.

Sleep—deficient. absent. interrupted. protracted. soundness. sleepiness. snoring. posture

[1] This subdivision has especial, though not sole reference to cases of insanity. In the present state of our knowledge of the several mental conditions included under this term, it has been considered advisable, and more likely to conduce to pure observation, to group the manifestations of disordered intellect and of the disorders of the moral faculty together, rather than to attempt their separation.

Dreaming.

incubus.

somniloquism.

somnambulism.

284. *Dreaming:*—different in any way from what is customary to the individual; subject of the dreams, something habitual to the individual when out of health; their character, terrific, fatiguing, distressing, etc.—*Incubus:* position in which it occurs; at what period after falling asleep?—*Somniloquism:* conversing somniloquism.—*Somnambulism:* phenomena presented during this state and on being suddenly awoke, perversions of the special senses, etc.;—condition of the pulse, respiration, and temperature of the body.—Frequency of occurrence of incubus, somniloquism or somnambulism;—conditions of their occurrence in regard of food, occupation, mental emotion, physical health, etc.

Behavior.

285. *Behavior:*—generally or in some particular respect different from that of all sane persons, or from that which is habitual to the individual when in health. (If the eccentric behavior be paroxysmal, note at what time the paroxysms occur, and the circumstances which induce them.)—Unusual reserve; obstinate silence; sulkiness; apathy; inactivity; neglect of business; refusal to eat or drink; melancholy; refusal to pass evacuations; dirtiness; refusal or indisposition to go to bed or to get up.—Unusual and unnecessary bustling, with or without motive; hastiness of conduct; conduct furious or uproarious, disposition manifested to strike, bite or injure persons and things (noting readiness or difficulty of controlling patient); unusual gesticulations; fanciful or eccentric dressing and decoration of the person, house, or room; constant repetition of the same act or acts without apparent object; individual walking about restlessly at night; absenting himself from home, and wandering.—Behavior haughty or inconsistent with in-

dividual's rank or station in life.—Oversight or neglect of ordinary moral obligations; disposition exhibited to solitude or to company, to extravagance, gaming, debauchery, drunkenness, indecency, cunning, falsehood, avarice; collecting or secreting odd and useless articles or articles of trifling value; attempts at stealing, murder, suicide, arson, or other crimes; unusual selfishness, etc.—Eccentricity of behavior, constant or varying in its character?

286. *Temper:*—unaltered; captious; peevish; morose; surly; irascible; violent (285). Temper.

287. *Spirits:*—even and calm; peculiar hopefulness; ennui; indifference; melancholy; unnatural gayety and excitement; spirits variable; involuntary laughter or crying, circumstances inducing them; alternation of laughter and crying. Spirits.

288. *Attention:* — exaggerated; engrossed by some one object of perception, external or internal, by the internal functions of the body, by certain mental ideas.—Defective; degree of impairment of attention, impossible to be fixed at all, capable of being directed for a time only (noting degree of difficulty in arresting attention); patient gazing steadily at questioner as if attending, but giving no sign by speech or otherwise of understanding him. —Perverted; want of fixedness of attention to one object, but flying off to others (distraction); attention engrossed by trivial matters.—Apparent endeavor made by patient to regulate the attention, if engrossed to distribute it to other objects, if defective to exercise it more fully, if distracted to concentrate it. Attention—exaggerated. defective. perverted. influence of will.

289. *Apprehension:*—unusually quick for the age of the individual; great readiness to learn.— Apprehension—quick.

dull.
absent.

Individual dull; stupid; unable to comprehend when addressed; unaffected in any way by passing occurrences; feeling no wants.—Total incapacity; connection of this with physical imperfection or deformity (cretinism).

Memory—
exaggerated.
defective.
special defects.

290. *Memory* (retentiveness and readiness of memory are, where possible, to be distinguished): —memory exalted or unusually good for age of individual;—specially exalted for certain subjects, as music, languages, rhymes, etc.;—the above subjects, after being long forgotten, recollected.—Defective; degree of impairment of memory estimated by questions respecting the course of events while patient has been under observation, respecting the day of the week, the period of the last meal, etc., by questions in multiplication table;—special impairment of memory, forgetfulness of recent events, rather than of others long passed, of the names of persons and things (note amount of assistance necessary for their recollection), of dates, of periods of time, of the sounds of printed characters (hence, the inability to read);—does memory appear to improve under emotion or excitement pleasurable or the reverse?—Perverted; hallucinations of memory (persons, events, etc., being presumedly recollected which were never, at any time, under the notice of the individual).

perverted.

Speech—
peculiarities.

291. *Speech* (as an intellectual act: *for Articulation*, see 280):—limited to monosyllables;—speechlessness, from want of volition, from trouble in speaking, from loss of memory of words; speech replaced or aided by signs;—ability to write words and answers to questions which patient is unable to pronounce.—Confusion of words (*e. g.*, yes for no, shoulder for head, etc.); when patient has used

a wrong word, is he conscious of its being wrong? if so, how is consciousness of it exhibited, by anger, by laughing at himself, etc.?—More or less constant repetition of syllables, of words, of sentences, of the same idea in different words, of the words of a question, of the words of the patient's own answer.—*Peculiar cries*, screams, moaning, etc. — cries.

292. *Conversation:*—individual exhibiting reserve, indisposition to enter into conversation; replies to questions, short, hasty, rude; obstinate taciturnity.—Individual entering readily into conversation; garrulous; freely opening his thoughts, exhibiting an absence of prudent reserve upon personal or family matters, etc.—Conversation coherent; its subject and character; constant disposition to introduce some one subject or class of subjects on all occasions;—constant repetition of the same words and phrases;—indecency of conversation; swearing;—eccentric, silly, or absurd reasoning or association of ideas; absurd theorizing and speculation (where possible, trace the chain of ideas; see also *Disordered judgment*, 294).—Conversation hurried; rapid change of subjects (if possible, trace the general character of their association).—Conversation incoherent and unintelligible.—*Soliloquism*, its subject and characters; accompanied or not by gesticulations? — Conversation: reserve. — garrulity. — coherent. — hurried. — incoherent. — soliloquism.

293. *Confessions and complaints of patient respecting his mental condition:*—expression of belief that the intellect is disordered or is becoming so;—complaints of loss of voluntary control over course of ideas;—of criminal thoughts (blasphemous, suicidal, homicidal, etc.);—consciousness of delirium and of extravagance of language, gesticulation, etc.;—of insane impulse, means which — Confessions of mental state.

patient is compelled to adopt to resist its operation; —expression of misery or happiness.

Disordered judgment—

294. *Disordered judgment:*—disbelief in self-evident truths; in personal identity; in the evidence of consciousness, perception, or memory; in the natural succession of events (*e. g.*, that night will succeed the day, etc.).—Defective power of deductive reasoning; conclusions slow, uncertain; degree of defect tested by the power to follow out simple processes of reasoning (*e. g.*, a syllogism).—Perverted judgment; grossly and absurdly incorrect conclusions drawn from correct data, (endeavor to trace the cause of this in the perversion of the faculties necessary to the reasoning process, in a ruling idea, in wandering of the ideas, perverted association of ideas, hallucinations of the senses or memory, etc.)

reasoning.

Fixed delusion or idea.

295. *Fixed delusion or predominance of one idea,* or of a certain series of ideas:—in relation to the past, the present, or the future; in relation to realities or to mental phantasms.—Delusion in reference to patient's own body, the entire or some part of it (inquire into condition of part referred to), *e. g.*, that animals or demons are in his belly, that portions of the body, or the entire of it, consists of wax or glue, that he is mercurialized, or suffering from syphilis, etc.;—in reference to his personality, *e. g.*, that he is some divine or dignified person;—in reference to rank;—in reference to wealth, *e. g.*, that he is possessed of large sums of money, or that they are kept back from him by injustice, that poverty is impending, etc.—Belief that he is being persecuted; that his life or property is being sought after; that he is about to be incarcerated.—Morbid dread of something definite or indefinite about to hap-

pen, *e. g.*, of death, of being poisoned, etc.—Religious delusion, its character.—Erotomania.—Effect of fixed delusion or predominant idea upon behavior (285), temper (286), spirits (287), and conversation (292) of patient;—their connection with illusions or hallucinations of senses (296), as cause or effect.

296. *Hallucinations and illusions*:[1]—of sight (325), of hearing (320), of taste (317), of smell (315); their characters; degree of belief expressed by patient in the reality of these;—their influence on the spirits (287), behavior (285), conversation (292), and reasoning (294) of the patient. Hallucinations or illusions.

297. *Vertigo*:—its severity;—circumstances which induce or exasperate it, *e. g.*, position of entire body, of the head, impressions on the organs of the senses;—its duration; accompanied or not by nausea? Vertigo—causes. duration.

298. *Delirium*:—constant or occasional? by night or by day?—fixed delirium, its subject, (if on any bodily function, note condition of organs performing that function;)—variable as to subject; its general character, muttering, surly, loquacious, noisy, violent (patient attempting to get out of bed, jump out of window, etc.), furious, wild, cheerful, jocular, fearful. Delirium—circumstances. subjects. character.

299. *Alterations in moral feelings and affections*:—evidenced by unusual and extraordinary conduct towards relatives and friends;—sudden or violent Alterations in moral feelings, etc.

[1] "*Hallucinations*"—*i. e.*, true mental phantasms or creations, bearing no relation to objects of perception present.

"*Illusions*"—*i. e.*, real objects, perceived with characters different from those which they actually possess.

partialities or dislikes (either eccentric, or contrary to patient's habits) manifested towards certain sounds, colors, inanimate objects, animals, etc.;—tumultuous feelings and emotions, joy, anger, sorrow, etc., alternating, with or without reasonable cause;—pleasure derived from toys or trifles.—Longings for improper or disgusting objects; for improper or unattainable articles of food.—Nostalgia.—Misanthropy; misogyny.—Suspicion (285, 292).

Sexual passion—defective. exaggerated.

300. *Sexual passion:*— defective; aversion to sexual intercourse;—exaggerated; satyriasis; nymphomania (signs to be sought in behavior and countenance of individual in presence of the other sex, blushing, changes of color, brilliancy of eyes, sighing, heaving or irregular respiration, etc.); priapism; masturbation, etc.

§ IV. L.

## L.—SPINAL CORD, ITS COVERINGS AND APPENDAGES.

*Physical examination of Spinal Column.*

### *Physical examination of the Spinal Column.*

Curves—

antero-posterior.

lateral.

301. *Curves, etc.* (examine patient in erect posture, when possible):—*Antero-posterior* curves (cervical, dorsal, lumbar); their condition; degree of posterior prominence of sacrum; altered position or inclination of os coccygis.—*Lateral* curves; condition of natural dorsal lateral curve;—abnormal lateral curvatures (estimate the amount by letting fall a cord perpendicularly from centre of nucha); elevation or procidentia of either shoulder; patient appearing to lean to either side or forwards; tilting outwards of either scapula; alteration in direction of ribs.

302. *Spinous processes.*—Any particular spinous process or processes unduly prominent or depressed, either when patient stands erect, bends forward or to either side?—direction of adjoining spinous processes in regard to each other. Spinous processes.

303. *Vertebral grooves:*—compared in regard of fulness on the two sides; local prominence produced in either by bending forwards. Vertebral grooves.

304. *Tumor:*—its site; form; transparent or opaque? solid; containing fluid, amount of fluctuation perceptible; attended or not by obvious fissure of the spine? — Condition of integument over tumor; alteration in color, thickness, etc. (B. p. 40). Tumor.

305. *Fistulous openings*, sinuses, etc.:—characters of discharge from them (616); microscopical (645 *et seq.*), chemical. Fistulæ.

306. *Other appearances:*—wounds (626); contusions; ecchymoses or other marks of injury (70). —Bedsores. Other appearances.

307. *Examination of spine anteriorly*, through abdominal soft parietes:—undue prominence anteriorly or laterally; tumor appreciable in connection with spinal column or dependent on bodies of vertebræ themselves (129 *et seq.*).—Displacement of aorta; unnatural amount of aortic pulsation (182). Spine anteriorly: tumor.

308. *Percussion.* — Any undue extension of percussion-dulness to side of spine? Percussion.

*General Symptoms referable to the Spinal Cord, etc.* *General Symptoms.*

309. *Manual examination of spinal column.*—Effects of gently passing the pulp of the finger or some light body along spinous processes or verte- Manual examination of spinal column—by finger.

bral grooves; sensation natural, mere tickling, shuddering, creeping sensation of cold, sickness, faintness, globus, hypochondrial pain, acute pain in spinal region;—precise point at which any of the above results are produced; does this vary by

by percussion. moving the skin?—Effect of percussion of medium strength, or of kneading, over spinous processes from above downwards;—effect of strong percussion;—effect of passing a heated iron (skin being protected by brown paper or similar substance), or of a sponge squeezed out of hot water along spine;—if pain is produced, note its position, character, and direction.

Local pain—character. 310. *Local spontaneous pain:*—precise character, lancinating, pulsatile, vibratile, creeping, aching, etc.;—seat; course upwards or downwards? limited

extent. to spinal region; extending to right or left of trunk, or to upper or lower extremities? its precise direc-

constancy. tion and point of termination;—pain constant or occasional? paroxysmal, slowly or suddenly deve-

accompaniments. loped?—accompanied by special sensations, sickness, faintness; palpitation of heart with paroxysms.—Pain influenced or not in amount and

circumstances affecting. character by flexion, anterior, posterior, or lateral, of trunk, or by still slighter movements; by walking; by turning in bed; by kicking either heel forcibly against the ground; by jumping on heels; by supporting body on crutches; by rotation of trunk in sitting posture; by jerking movements given to the body by observer; by various kinds of percussion; by passing hot iron or hot sponge over spine; by nervous excitement, etc.

Sensibility. 311. *Alterations of sensibility* (K. p. 99):—effect of prone, supine, or erect postures upon these.

Motility. 312. *Alterations of motility* (K. p. 101):—effect of prone, supine, or erect postures upon these.

## M.—ORGANS OF THE SENSES.

§ IV. M.

### *Organs of Touch.*

*Organs of Touch.*

313. For particulars see *Integuments*, p. 40, and *Alterations of Sensibility*, p. 99.

### *Organs of Smell.*

*Organs of Smell.*

314. *Physical examination, etc.* (148).

Physical examination.

315. *Sense of smell:*—perception of odors, impaired, absolutely wanting;—exaggerated; perverted, illusions or hallucinations of smell.—Peculiar influence of special odors.

Sense of smell: impaired. exaggerated. perverted.

### *Organs of Taste.*

*Organs of Taste.*

316. *Physical examination, etc.* (*Tongue*, 92; *Palate*, 91; *Fauces*, 102).

Physical examination.

317. *Sense of taste:*—impaired; absolutely wanting;—unusually acute;—sense of taste compared at base and tip, or on two halves of tongue; any special point deficient in power of taste (state how any of the above have been determined);—particular sensibility to special tastes, *e. g.*, sweet, bitter, etc.—Taste perverted; illusions of taste, *e.g.*, acid substances tasting alkaline, sweet substances tasting bitter, etc.; hallucinations of taste, *e. g.*, bitter, acid, disagreeable tastes, etc., in the mouth.

Sense of taste: impaired. too acute.

perverted. illusions.

hallucinations.

### *Organs of Hearing.*

*Organs of Hearing.*

318. *Physical examination:—External ear:* its form; size; swellings, their exact seat, character, and contents; color; temperature; eruptions (77

Physical examination. external ear.

mastoid process.

meatus externus.

cerumen.

foreign bodies.

discharge.

Eustachian tube.

membrana tympani.

*et seq.*), ulcers (624).—*Mastoid process:* unduly prominent or depressed on either side; subcutaneous emphysema produced or not by blowing nose?—results of auscultation over mastoid process; entry of air into cells marked by distinct murmur or attended by rhonchus.—*Meatus externus:* tender to touch;—lining membrane swollen, turgid, discolored generally or over particular points;—fungosities, vegetations, ulcerations (624), incrustations, eruptions, etc.—*Cerumen* too abundant; deficient; altered in quality; microscopic examination of it (645 *et seq.*).—Foreign bodies in meatus.—*Discharge* from meatus; its abundance; its appearance, serous, purulent, bloody; its odor; accompanied by particles of bone, by foreign bodies; containing bubbles of air.—*Eustachian tube:* results of catheterism of Eustachian tube; test its perviousness by auscultation over mastoid process. —*Membrana tympani:* state of its surface; color, rosy, dull white, etc.—perforated or entire? sibilation produced by forcible expiration, the mouth and nose being closed (audible by patient or on use of stethoscope)? movement of the flame of a taper held opposite the meatus during same process?

Pain—

other sensations.

319. *Pain referred to the ear:*—its character; apparent depth; severity; constant or periodical? circumstances inducing it.—Sense of pulsation in ear; other abnormal sensations, as tickling.

Sense of hearing—

exaggerated.

defective.

320. *Sense of hearing:*—exaggerated; intolerance of sound generally, slightest sounds appearing more or less intense; intolerance of particular kinds of sound.—Defective; amount of impairment of hearing (distance at which the ticking of a watch is heard); impaired for notes of particular pitch,

high or low; are sounds heard better when sonorous body touches teeth, mastoid process, or external ear?—Perverted; illusions of hearing, *e. g.*, murmuring or other continuous noise mistaken for voices and conversations, etc.;—hallucinations of hearing, various sounds in the ears; tinnitus aurium, in one or both ears, its precise character, constant or transient? affected or not by posture, efforts, exercise, eating? accompanied or not by sounds in the vessels discoverable by auscultation? voices and conversations imagined to be heard, etc.—Sensibility to discords and pleasure from concords lost.

perverted. illusions.

hallucinations.

*Organ of Vision and its Appendages.*

*Organ of Vision, etc.*

321. *Eyebrows:*—their comparative elevation, etc. (280).—*Eyelids:* their thickness; color; vascularity; state of integument, eruptions (77 *et seq.*), œdema; solid indurations.—Degree of closure, as compared on the two sides; facility with which eyelids are closed; contraction of orbicularis, permanent or spasmodic? degree of resistance to the eye being opened by observer; nictitatory movements.—Lids motionless when conjunctiva is touched, or a body is suddenly brought near the eyes.—Abnormal sensations accompanying movements of lids, pain, stiffness, dryness, etc.—*Eyelashes:* absent, scanty, abundant; their length, direction, etc.—*Tarsal Cartilages:* thickened; turned inwards or outwards;—their edges, red, injected, covered with secretion (its character).—*Meibomian glands and ducts:* their appearance, enlarged, obstructed, etc.—*Puncta lachrymalia:* freedom of orifices.—*Carunculæ lachrymales:*

Eyebrows, etc.—eyelids.

eyelashes.

tarsal cartilages.

Meibomian glands.

puncta lachrymalia.

carunculæ lachrymales.

their size; color; uneasy sensations referred to them.

Eyeball—

prominence. movements. axes. conjunctiva. sclerotica. cornea. iris. pupils.

322. *Eyeball generally:*—its size; its degree of prominence (compared on the two sides); its form. —Its movements; eyeball motionless; movements irregular, rotatory; tendency to turn upwards or in any particular direction.—Direction of axes of eyes (luscitas, strabismus), convergent or divergent? natural direction of axis of affected eye restored or not by closing unaffected one?—*Conjunctiva* (generally or locally): its transparency, color, thickness; moisture, abundance of secretion; particles of mucus accumulated upon it; its degree of vascular injection; mammillations or granulations; vegetations, ulcers (624); foreign bodies.—Sensibility of conjunctiva.—*Sclerotica:* vascular injection, generally or in the form of a zone around the cornea? its degree; general color of sclerotica, dull white, waxy, yellow, yellowish-green, bluish, like tarnished ivory. —*Cornea:* its form, degree of convexity; smoothness of surface;—transparent; opaque (partially or entirely); opaque ring at its periphery;—cicatrices; ulcers (624); wounds, with protrusion of iris or not?—Foreign bodies sticking in cornea, etc.—*Iris:* its color; presenting two rings, their comparative size; form; convex forwards or backwards? borders, thin, thickened (irregularly or equally?), free or adherent? angular, puckered;—fissures in iris; deposits or tumefactions upon it.—Action under influence of light; slow or rapid? equable and isochronous in the two eyes or not? oscillations or tremulousness of iris.—*Pupils:* dilated, equally or unequally? contracted, equally or unequally? one dilated and the other contracted; alternate contraction and dilatation of pupil.—Effect of light

upon pupil; contraction, slight, marked, slow or immediate? dilatation; slight, contraction followed by dilatation; contraction followed by oscillation; —effects of admitting the light or shutting it out from the other eye.—*Aqueous humor:* its quantity; color; transparency or opacity? foreign bodies in it.—*Lens:* its position; transparency or opacity, its degree, extent, and color.—*Vitreous humor:* its color and appearance.

aqueous humor. lens. vitreous humor.

323. *Tears:* their abundance;—flow excited by trifling circumstances;—stillicidium;—epiphora; —acridity of secretion; chemical reaction of tears.

Tears.

324. *Pain:*—seat, deep or superficial? characters; increased by movements of the eye, by light; following the course of any particular nerve;—attended by any temporary peculiarity of vision, by vomiting or nausea.—Extreme sensibility to light; photophobia; opsiphobia (or fear of using vision); —sympathetic effects of a strong light, sneezing, sickness, tickling in internal ear, etc.

Pain— seat. characters. sensibility to light. sympathetic effects.

325. *Sense of sight:*—length of distinct vision of distant objects; focal distance, vision of near and distant objects compared; myopia, presbyopia; amount of light necessary for perfect vision.—Hemeralopia; nyctalopia; total blindness, "how tested?"—Vision defective; amount of vision remaining, power of distinguishing light from darkness, the general form of objects, etc.;—defect constant or occasional?—portions or points of an object not being seen, or replaced by black spots; —visibility of luminous ring on pressing eyeball.—Sensibility of eye to particular colors lost, the complementary colors being perceived.—Vision perverted; illusions of vision, objects appearing of different form, color, etc., or mistaken in their cha-

Sense of sight: focal distance. blindness. defective vision. sensibility to colors. perverted vision. illusions.



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racters; objects appearing double (tested in each eye separately), the objects lying one above the other or side by side? dazzling (effect of erect or recumbent posture upon it);—hallucinations, flashes of light in darkness, sparks, muscæ volitantes, visions (their characters).

hallucinations.

§ IV. N.

## N.—NERVES.

*Cerebro-spinal and Sympathetic.*

Pain—seat. characters. accompaniments.

326. *Pain:*—its seat; nerves affected by it; its characters, obtuse, acute, burning, shooting; direction and course of pain;—color of skin over painful parts; appearances in neighboring organs; enlarged veins; throbbing of arteries; increased secretion from neighboring mucous membranes; disturbed function of neighboring organs—*e. g.*, intolerance of light, etc.;—pain aggravated by a slight touch; relieved by firm pressure;—continuous, remittent, intermittent; duration of paroxysms; time at which they occur.—Other sensations, numbness, creeping, pricking, itching, etc.—(See also *Pain and other abnormal sensations* referable to head (266), thoracic organs (163), abdominal organs (133), joints (83).)—Enlargement in course of a nerve.—Tenderness in course of a nerve; exact points where such tenderness is discovered.

duration.

other sensations.

enlargement of nerve. tenderness.

§ IV. O.

## O.—VASCULAR GLANDS.

Thyroid gland.

327. *Thyroid gland:*—enlargement; its size, form, on one or both sides? consistence; tenderness; effect of pressure, exertion, or mental emotion upon it.—*Thymus gland:*—fulness at lower part of neck;—dulness on percussion over region of gland,

thymus gland.

its extent; alterations in auscultatory signs (152, 162);—respiration, its characters, etc. (169).

328. *Suprarenal capsule:* —(see *Abdominal tumors*, p. 27.) Suprarenal capsule.

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[In observing the *progress of the case up to recovery or death*, the phenomena should be noted in the same order as in § IV., and any new influence brought to bear upon the patient in the same order as in § III.

The *diet, regimen, external applications, and internal medicines* prescribed, should be accurately noted, and likewise whether the treatment ordered has been carefully carried out, and the hours at which the several remedies have been applied or given. The period, also, at which the notable effects of remedies (*e. g.*, vomiting after emetics, sleep or cessation of pain after narcotics, dilatation of the pupil or dryness of the fauces after belladonna, etc.) have occurred, the date of the cessation of the different symptoms of disease, and the period of convalescence or recovery, and of discharge (if the patient be in a hospital), should be closely observed and carefully described.

If the case prove fatal, the phenomena of approaching *death* should be accurately noted, and also whether the fatal termination be accompanied by symptoms referable to asphyxia, coma, syncope, etc., the condition of the mental faculties, and whether convulsions be present or absent.]

# PART II.

## EXAMINATION OF A BODY AFTER DEATH.

§ I.

### § I.—Points to be ascertained and noted prior to commencing an Examination.

329. *Name.* — Name.

330. *Date of death,* presumed or ascertained. — Date of death.

331. *Date of examination:*—"in a medico-legal case, precise time (local time) when called to see the body."[1] — Date of examination.

332. *Weather,* from the date of death to that of examination.—*Temperature* to which body has been exposed. — Weather.

333. "*Medium in which body has lain* from date of death to that of examination;—in earth, clay, sand, gravel, mud;—in water, salt, fresh, stagnant, running, turbid (from earthy, vegetable, or animal matters?);—in gas, carbonic acid, sulphuretted hydrogen, etc. (noting circumstances under which it has been exposed to the above)." — Medium in which body has lain.

334. "*Substance on which body has lain.*" — Substance on which lain.

335. *Posture of body* between death and examination; on back, on face, etc.;—length of time it has lain in that posture. — Posture.

[1] As in Part I., the several points for observation included within commas have especial reference to medico-legal inquiries.

Position in relation to other objects.

336. "*Position of body* in relation to the room, stairs, etc.; to articles of furniture;—relation of parts of body to the above.—If found hanging, note posture of body, and how much touches ground."

Odor.

337. "*Odor* in the room, at different parts of it; near body or at a distance from it?—Odor about body itself before stripping, after clothes have been removed (of poisons, of putrefaction, etc.)."

Clothing—

338. "*Clothing on body* or lying near it (noting special articles).—Nature and amount of covering;

vomited matters.

its arrangement; evenly or in creases?—*Vomited matters* upon them, on what part? examine for

blood-stains.

poisons (139).—*Blood-stains* on clothes, on which articles? chemical and microscopical examination of stains;—part of clothing thus marked, so as to indicate posture of individual at time blood flowed over clothing;—blood appearing to have been sprinkled, as by jets from an artery, over the articles of dress; smeared, generally; soaked through; stain chiefly outside or inside the garment?—does stain correspond with a wound in the dress or body?—marks of a bloody hand on clothing, at what

other stains.

parts? of one or both hands?—*Stains of other kinds:* of semen; of discharges; microscopical examination of stains (show absence of starch);—of acids.—

wounds of dress.

*Wounds of dress;* their situation; size; cut or torn? corresponding or not with wounds in body?—bloody or not? side to which blood chiefly applied.—

burns of dress.

*Dress blackened or burnt,* extent and situation of

position of bedclothes.

injury.—*Position of bedclothes,* if body is in bed."

Manipulation.

339. *Degree of manipulation* to which body has been exposed;—removal from the place at which death occurred, or where it was first found; the

manner in which this was effected, lifted by hands or feet, or both, etc."

340. "*Cord around neck:*—its precise characters;—mode in which placed round, and its exact situation;—situation of knot;—knot single or double; firmness of each knot.—*Umbilical cord;* if round neck or body, note in what manner it is disposed, its condition, amount of stretching, etc."

Cord round neck.

umbilical cord.

341. "*Articles about body:*—furniture and walls;—spots of blood on them, their exact situation, size, form, and direction; shining or dull.—Weapons (628).—Dishes, plates, or articles of food.—Bottles, corked or not.—Vomited matters, their exact situation, characters (139).—(Preserve and examine chemically and microscopically any of the above which may throw light on the case.)"

Articles about body.

342. *Feces and urine,* found under body.

Feces, etc. under body.

343. "*When body is exhumed,* note condition of coffin as to soundness.—Examine soil, if necessary, for presence of metallic poisons—*e. g.,* arsenic or copper."

Condition of coffin, etc.

## § II.—Points to be noted during Examination.

§ II. A. **A.—GENERALITIES.**

Sex. 344. *Sex:*—degree in which external sexual characters are marked; general conformation, external sexual organs, mammæ, beard, pubic hair, etc.

Age. 345. *Apparent age:*—evidences of age (370); —if infant, proportional size of head and trunk.

Posture. 346. "*Posture* of body:—at time of examination, or when first seen by observer; on the back, on the face, etc.;—composed as in natural rest; constrained;—limbs flexed or extended? position of head, etc.; hands clenched, in what manner? thumb turned into palm of hand, and fingers closed upon it, etc.;—toes contracted.—Limbs secured by ligatures."

Countenance. 347. "*Expression of countenance:*—calm; suffering; features distorted; lips retracted so as to show the teeth;—eyes prominent and staring;—fulness of features as during life; countenance bloated."

Measurements— height. width. length of trunk, etc. circumference of limbs, etc. 348. *Measurements of body:*—*Height*, from vertex to plantar surface of feet.—*Width* from acromion to acromion; of hips, from extreme right to extreme left borders of iliac crests.—Length of trunk, from top of sternum to symphysis pubis; length of limbs.—Relative circumference of limbs; circumference of thorax (159); circumference and other measurements of head (4).

Weight. 349. *Weight of body.*

350. "*Striking individual peculiarities:*—spinal curvature; depression of lower end of sternum; deformities of limbs, etc.; want of symmetry on the two sides of body (note in what particulars).—Marks upon the surface, their characters (*e. g.*, tattooed marks, etc.);—complexion.—Form of lips.—Form of hands, fingers (especially their extremities), and feet;—state of nails, worn down or not?—thickening of skin on hands, corns, etc., their exact situation, size, color, etc.;—stains on hands and arms, etc. (as indicating trade or occupation of person)." Individual peculiarities: deformities. marks on surface. form of lips. form of hands, etc.

351. *Temperature of the body* (as perceived by the hand and by thermometer);—on exposed parts; on covered parts; in axillæ; in mouth, etc. Temperature.

352. *Cadaveric rigidity:*—its degree at particular joints; relative degree on the right and left sides;—date of appearance and disappearance. Rigidity.

353. *Nutrition of body:*—body apparently well nourished; muscular; fat.—*Emaciation;* its degree; degree of sinking in of eyeballs and cheeks; looseness of integument, etc. Nutrition—emaciation.

354. *Putrefaction of body:*—color of surface (355); coherence of parts of body, of bones and soft parts; state of cuticle (356).—"Saponification; name parts converted into adipocire, and degree of conversion;—examination of adipocire for poisons."—Incrustation with saline matter. Putrefaction: saponification. incrustation.

## B.—INTEGUMENT AND ITS APPENDAGES. § II. B.

355. *Color of surface:*—generally; over superior parts; over depending parts; over superficial veins; over abdomen; over parts exposed to pressure;—tint uniform or mottled?—effect of pres- Color of surface—

sure upon it; — " stains of acids, etc." — Special
of hands. color of hands and nails; of fingers at roots of nails;—" hands discolored by gunpowder, one or
of face. both?"—color of face.

Cuticle— 356. " *Cuticle:*—adherent;—ruffled or shrivelled; capable of being readily detached; detached and lying on skin; absent; (note the exact spot and extent over which the above are perceived.)—Cuticle dry or moist?—In new-born infant, presence
vernix caseosa. or absence of *vernix caseosa.*"

White lines. 357. " *White lines:*—on abdomen and outside thighs (lineæ albicantes); on breasts.—Brown line from umbilicus to pubes."

Contusions. 358. " *Contusions:*[1]—their locality; on one or both sides? measurements;—color; condition of cuticle over them.—Form of ecchymosis; resembling or not marks of fingers? their exact relative position (with a view to determine which hand was used in causing them);—resembling mark of a cord, or presenting form of some weapon?—Blood found effused on dissection, its amount; liquid or coagulated? extent of effusion; is any large vein ruptured? Firmness or tenacity of skin at ecchymosed spot; — does discoloration extend through its thickness, or only partially through it?"

Eruptions. 359. " *Eruptions:* — their locality, characters (p. 43);—sudamina, their number, situation, size, contents, reaction.—Bullæ or vesications.—Flea-bites.—Purpuric spots; condition of cutis on section through them.—*Indurated yellow patches*, as after blisters."

[1] In bodies which have been submerged, marks of bruises should be looked for, not only immediately on removal from the water, but again when the body has become dry.

360. "*Burns:*—locality; size; depth;—condition of edges; condition of cuticle around;—vesication; surrounded by redness or not? width of redness, terminating abruptly or shading off gradually? depth of redness;—white line surrounding the burn;—contents of vesication, air, serum; color of true skin beneath;—charring of tissues; fissures in charred part (particulars as *wounds*, 626 *et seq.*): vessels seen running across fissures or not?—slough (618 *et seq.*).—Condition of clothing about parts burned or charred (338)." Burns.

361. "*Mark round neck:*—single or double? extending round neck entirely or partially?—exact situation, in relation to larynx;—direction, horizontal, oblique; if oblique, where is lowest part situated?—accompanied or not by a groove?—width of mark; color; ecchymosis;—cuticle abraded or ruffled, shining or not?—depth of ecchymosis;—condition of parts beneath the mark;—cellular tissue, condensed, of silvery whiteness, containing blood or not?—condition of muscles, trachæa, larynx, etc., as to laceration, fracture, or effusion of blood;—any injury of vertebræ, ligaments, or spinal cord?—Examine for marks of fingers or nails about face and throat (358)." Mark round neck.

362. "*Wounds* (626 *et seq.*).—*Cicatrices* (629).—*Punctures:* their exact seat, corresponding to spinal cord, fontanelles, cribriform plate of ethmoid bone, etc.—*Abrasions* or scratches; their locality; size, etc.; direction of scratches; marks of nails, their situation (specially examine hands or fingers)." Wounds, etc.

363. "*Hair:*—color; quantity; length; condition." Hair.

364. "*Nails:*—their form; degree of develop- Nails.

ment; size;—morbid conditions; color; laceration; length;—condition of ends (*e. g.*, split, bitten, etc.);—foreign substance under nails, their precise characters (preserve and compare these with matters near which body was discovered, etc.)."

Œdema. 365. *Œdema:*—of trunk; of limbs; of face.—Characters of fluid obtained by puncture (601).

Emphysema. 366. *Emphysema:*—locality; degree; nature of gas.

Subcutaneous fat. 367. *Subcutaneous fat:*—amount, on limbs; on abdominal and thoracic walls; color.

§ II. C. C.—ORGANS OF LOCOMOTION.

Muscles—development. 368. *Muscles:*—degree of development; diminished in bulk, increased in bulk (if not general, name muscles affected);—color; degree of firmness;—section, dry, moist, sticky; "odor on section:"—blood extravasated among fibres (fluid or coagulated?);—abscess or infiltration of pus.—Rupture of fibres.—Gangrene (618).—Wounds (626).—Foreign bodies.—Parasites.—General saponification.—Microscopical examination; fatty degeneration or other changes.—Growths in muscles, their characters.

color, etc.

section.

extravasated blood, etc.

rupture, etc.

microscopical examination.

growths.

Tendons, etc. 369. *Tendons and aponeurosis:*—color; consistence; thickness; degree of moisture or dryness; transparency; rupture; ossification; calcification.

Bones—size, form, etc. 370. *Bones:*—"size;" form, alterations from normal shape;—increased diameter or thickness; diminished diameter or thinness;—condition of apertures on surface;—exostoses, their situation, size, and other characters; density of substance; flexibility; fragility; caries; necrosis; abscess;

exostoses.

consistence.

caries, etc.

hemorrhage; cancerous (638 *et seq.*) or tubercular-looking matter (644).—"Length of long bones; height of entire body as calculated therefrom."—*Periosteum:* color; thickness; degree of attachment, etc.—*Endosteum* and *medulla:* changes in them.—"*Fractures:*—their exact seat;—ununited; edges showing marks of cutting instruments or not?—Amount of union process;—united.—Condition of soft parts over fracture.—Fracture on one or both sides?—In bones surrounding large cavities, note condition of contained parts, extravasation of blood, wounds, lacerations, etc.—Effusion of blood about fracture, its amount.—*Peculiarities connected with age:* state of ossification; condition of epiphyses; condition of fontanelles, sutures, diploe;—shape of maxillæ and condition of dental alveoli;—neck of femur, angle formed with shaft.—*Peculiarities connected with sex:* clavicles; pelvis;—general smoothness or roughness of bones?—In cases of suspected poisoning, examine if necessary for arsenic."

length.
periosteum.
endosteum.
medulla.
fractures.
peculiarities from age.
from sex.

371. *Thoracic cartilages:*—consistence; color; degree of ossification.

Thoracic cartilages.

372. *Intervertebral substance:*—consistence; color; degree of union to bone; foreign matter in it.

Intervertebral substance.

373. *Joints:*—form; measurements; flexibility.—Condition of integument over them; its color, vascularity, and tension;—fistulæ; laceration.—Fluid within joint; its characters.—Condition of the several parts of the joint; synovial membrane, cartilages, ligaments.—Anchylosis; nature of connecting medium.—Foreign bodies in joint; their number, form, size, and nature;—loose or attached?—Condition of articular ends of bones; deepen-

Joints—form, size, etc. skin over.
fluid within tissues of joints.
anchylosis.
foreign bodies.
ends of bones.

surrounding soft parts. dislocations.

ing or shallowness of articular cavity; apparent cause of these conditions; eburnation.—Condition of soft parts around joints; thickening, etc.—*Dislocations:* recent or of long duration?

§ II. D.

## D.—ORGANS OF DIGESTION.

*Mouth.*

### *Mouth.*

Lips—

374. *Lips:*—absent? apparent cause of absence; —malformations.—Open; closed, by rigidity of muscles, by "aid of ligatures," etc.—*Foreign matters* about lips or coherent to them (*e. g.* portions of food, of dress, or of soil);—fluid about lips; increased or not by pressing thorax or abdomen, or by moving the body? its characters, frothy, etc.; color, red (from blood or other matters? determined by microscope), dirty green, yellow, etc.—dried foam, etc.—*Relative position of lips and teeth;* lips indented, clasped, or lacerated by teeth.—*Size* of lips; thickness;—color, pale, livid, white, brown, black, yellow; reaction of surface, if stained;—surface, moist or dry?—cuticle peeling, detached;—vesicles; exudations (sordes); sloughs (618); ulcers (624); tumors (631 *et seq.*); wounds (626), etc.—*Labial glands:* their size and characters.

matters about lips.

relative position of lips and teeth.

external characters.

labial glands.

Jaws.

375. *Jaws:*—open, to what degree? capable or not of being closed?—closed, completely or not? capable or not of being opened? "means adopted to keep them closed;"—muscles rigid or not?

Cavity of mouth.

376. *Cavity of mouth:*—contracted, from what cause?—communicating with nose or with the exterior (in what way?)—Contents; food, foreign matters, etc. "degree of impaction."

contents.

377. *Gums:*—size;—color; generally, at edges (if purple, breadth of purple line and its definition; if red, breadth of line and intensity);—surface, dry, or moist?—consistence; hard, soft, spongy;—degree of adhesion to teeth.—Exudations (sordes), etc., on surface (594);—"foreign substances adherent to them;"—sloughs (618); ulcers (624), on surface or confined to line of junction of gums and teeth;—solutions of continuity from recent extraction of teeth.—*Section* of gums; characters of tissue and of fluid exuding.

Gums—external characters.

section.

378. *Teeth:*—number? names of those present (noting whether of the first or permanent set);—number absent? names of absent teeth; cause of absence, non-development or extraction?—Loose or firmly fixed? carious; "recently fractured?"—amount of fangs left uncovered by gums;—condition of alveoli (abscess, fracture, etc.).—Exudation (sordes), etc. on teeth; amount of tartar;—"foreign matters adherent to teeth or clenched between them."

Teeth.

379. *Cheeks:*—outer surface, its condition;—inner surface; adherent to maxillæ; bulging;—condition of mucous membrane (595); secretions or exudations upon it (594).—*Substance* of cheek; thickness; consistence; œdema; tumors (631); wounds (626), corresponding or not in position with fractured teeth? cicatrices (629);—section; characters of tissue and of fluid exuding.

Cheeks—external characters.

substance.

380. *Tongue:*—absent? apparent cause of absence; malformation;—adherent or not to cavity of mouth or sides of fauces?—Size;—form.—Position; retracted, protruding from mouth.—Surface; fissured, furrowed, lobulated, presenting marks of bites (recent or not?), sodden-looking,

Tongue—

size, form, etc.

surface.

denuded of epithelium, clean, furred;—edge, indented by teeth;—color, pale, white, livid, brown, black, red, yellow ("if stained, reaction of stained part"); — papillæ, their condition;—vesicles, exudations, etc.—condition of under surface; minute vesicles or abscesses.—Submucous tissue at root of epiglottis, its condition (596).—Substance of tongue; consistence; œdema; sloughs (618); ulcers (624); tumors (631 *et seq.*); wounds (626);—section; characters of tissue and of fluid exuding.

substance.

Hard palate.

381. *Hard palate:*—malformations; fissures, etc.

*Salivary Glands and Ducts.*

### *Salivary Glands and Ducts.*

Glands—external characters.

382. *Glands (Parotid, Sublingual, and Submaxillary):*—swelling externally, over glands, in course of Steno's duct; œdema;—size; consistence.—*Section:* texture of cut surface; color;—fluids expressible; abscess (606 *et seq.*); cysts; tumors (631 *et seq.*); etc.

section.

Ducts.

383. *Ducts:*—size; dilatation, general or partial? its physical cause; obliteration; thickness of coats; size of orifices;—fistulæ;—calculi, their number, size, and physical characters;—retained saliva, its characters.

*Throat, etc.*

### *Throat, etc.*

Fauces.

384. *Fauces:*—size of opening; if contracted, from what cause?—condition of pillars;—exudation, etc. (594); condition of mucous membrane (595).

Uvula and velum pendulum.

385. *Uvula and velum pendulum palati:*—malformations; fissure, etc.; — size of uvula,

especially its length; condition of free extremity, excised or not?—color, etc. (595);—exudations upon surface (594); microscopic fungi present or absent? condition of subjacent mucous membrane (595);—condition of submucous tissue (596).

386. *Tonsils:*—size, absolute and comparative; form; position; interval between them;—surface, smooth, uneven, rough, pitted;—condition of openings; follicles empty or blocked up with secretion?—secretions, their odor; lymph or other exudation (603); calculi; tumors (631 *et seq.*);—color of surface (595); "if stained, reaction of stained surface;"—sloughs (618 *et seq.*), their size, degree of detachment; condition of subjacent surface (595);—ulcers (624), etc.—Section; characters of cut surface, color, consistence, etc.; character of fluid expressible.

Tonsils—external characters.

section.

387. *Pharynx:*—size of cavity; if contracted, whether from contraction of membranes, thickening of submucous tissue, or pressure of tumors, etc., external to it?—*Contents* of cavity; "foreign bodies; their nature and degree of impaction (if portions of linen, etc., preserve them for comparison)."—*Diverticula;* seat; size; form; relation to surrounding parts; tissues composing them; contents (food, etc.).—*Mucous membrane;* its condition (595); exudations and secretions on surface (594), presence or absence of microscopical fungi;—ulcers (624); sloughs (618 *et seq.*); fissures; wounds (626 *et seq.*).—*Submucous tissue;* its condition (596). *Pharyngeal muscles;* color, firmness, etc.

Pharynx—size, etc.

contents.

diverticula.

mucous membrane.

submucous tissue.

pharyngeal muscles.

388. *Œsophagus:*—malformations;—displacement; its direction; cause, tumors or collections external to it, etc.;—dilatation; general, with hypertrophy or attenuation of muscular coat? partial,

Œsophagus—displacement.

dilatation.

stricture. its seat and size;—contraction or stricture; seat; extent; depending upon a morbid state of the substance of the œsophagus, or upon a tumor, etc., external to it? calibre of œsophagus at strictured part, above it; below it; condition of edge of stricture; ulceration present or absent? mucous membrane around puckered or not? condition of submucous tissue; induration of substance of œsophagus at or around strictured part? cause of induration. — *Diverticula:* position; form; size; relation to surrounding parts; tissues composing them; contents.—*Contents* of œsophagus; food; "foreign bodies, mud, etc., their character, degree of impaction," etc. —*Mucous membrane* (595); secretions and exudations (594); ulcers (624); sloughs (618 *et seq.*), etc.—*Submucous tissue* (596).—*Muscular coat;* color; firmness, etc.;—circular or longitudinal fibres abnormally developed, generally or partially?—if stricture be present, condition of muscular coat above and below it.—*Openings* through œsophagus; parts with which they communicate; apparent cause of opening (congenital, bursting of abscess and aneurism, softening of cancerous matter, etc.).—*Wounds.*

diverticula.

contents.

mucous membrane.

submucous tissue.

muscular coat.

openings.

wounds.

*Abdomen generally.*

External characters.

Umbilical cord.

*Abdomen generally.*

389. *External characters:*—(108 *et seq.*)

390. "*Umbilical cord:*—adherent or detached? length of attached portion; presence or absence of a ligature? nature of ligature; extremity, cleanly cut or torn? color; dry or moist? corrugated or not?—if detached, condition of surface of umbilicus, healed or not?"

*Peritoneum.* — *Peritoneum.*

391. *Contents:* (597)—Articles of food, etc.; their amount, position on membrane, special nature; —condition of membrane in neighborhood. — Contents.

392. *Condition of Membrane:* (598)—Specify the exact seat and extent of any morbid changes; —correspondence with morbid appearance of parts and organs which membrane covers;—condition of duplicatures of peritoneum, omenta, mesentery, mesocolon, ligaments of liver, spleen, uterus, etc. (particulars as peritoneum generally). — Condition of membrane: of folds.

393. *Herniæ:*—parts through which they have occurred;—organs or parts of organs included in herniæ; their condition (397, 404). — Herniæ.

394. *Tumors* (631 *et seq.*). — Tumors.

395. *Sub-peritoneal tissue:*—(599). — Sub-peritoneal tissue.

396. *Mesenteric and other lymphatic glands* (477 *et seq.*). — Mesenteric glands, etc.

*Stomach.* — *Stomach.*

397. *External characters:—Position:* in relation to general cavity of the abdomen, to adjoining parts and organs; in herniæ; in cavity of thorax. —*Size:* measurements (before and after opening stomach); extreme length from fundus to pylorus; extreme transverse measurement; transverse measurement in the middle of the organ; length of smaller curvature; length of greater curvature.—*Form:* presenting annular contraction or sacculation (401)? effect upon these of inflating the stomach.—*Adhesions* (605).—Condition of *peritoneal coat* (598): relation of morbid states of — External characters—position. size. form. adhesions. peritoneal coat.

peritoneal coat, as regards position, to abnormal appearances of mucous membrane (399, 401).

Contents—

398. *Contents:*—quantity of contained matters, (measured or otherwise estimated?)—odor; color generally; reaction; microscopical characters (sarcinæ ventriculi).—"*Food:* its special nature, if capable of being identified; bread, etc. (tested for by iodine); fat (tested for by heat); degree of digestion."—*Blood:* pure or mixed with food? fluid or coagulated? color; apparent source, if discoverable.—"*Foreign matters* recognizable by the eye (endeavor to identify them);—vegetable matters, their special characters and apparent source;—mineral substances, salts, powders, metallic particles;—spirits, their odor;—water, its quantity, special character, and contents (*e. g.*, algæ); mud; hair, etc."—*Fecal matters:* quantity; characters;—bile; calculi; pus; worms.—"Where *poisons* are suspected to be present, determine presence and quantity by chemical examination; test for volatile substances with the least possible delay."—*Gas:* quantity; odor, and other characters.

food.

blood.

foreign matters.

fecal matters.

poisons.

gas.

Mucous membrane: secretions, etc. on surface.

rugæ.

condition of membrane.

399. *Mucous membrane.—Secretions, etc. on surface* (594): "Foreign particles entangled in mucus, their physical and chemical characters; condition of membrane subjacent."—Limitation of lymph, etc. to surface of rugæ.—*Rugæ:* present or absent? their situation.—*Condition of membrane* (595): color generally; color of rugæ; of parts between rugæ;—relative depth of hue of anterior and posterior surfaces, of cardiac and pyloric extremities.—Redness general or limited to surface or edges of rugæ?—Mammillation; its seat and extent.—Absence of any part of membrane? are

submucous or muscular coats wanting at same spot?—if a portion is absent or removable by washing, is its seat at the most depending part of organ, or at the rugæ? aspect of adjacent blood-vessels.—Length of strips obtainable from pyloric extremity; from cardiac extremity; from curvatures, greater and smaller; from anterior and posterior surfaces.—Thickness at pyloric extremity; at cardiac extremity; at lesser curvature; at greater curvature; on surface of rugæ; between rugæ.—*Submucous tissue:* its condition (596). submucous tissue.

400. *Muscular coat:*—thickness; alterations in thickness, general or partial?—degree of visibility of muscular fibres. Muscular coat.

401. *Substance of wall of stomach:*—transparency when held between observer and the light;—thickness (measured in various parts).—Wounds (626).—Perforation (625): exact situation, on which surface? near which curvature? etc.—"Alterations in organs adjacent to perforated spot; softening; corrosion; blackening, etc."—Rupture; its seat, extent, direction, etc.—If adhesion be observed between stomach and adjacent parts, note if it corresponds in position with ulcers, cicatrices, or perforations discovered after opening the organ.—If circular constriction be observed, note if it corresponds in position with softening or induration of mucous or submucous coats, ulcers, perforations, or cicatrices.—Weight of stomach.—"In case of suspected poisoning, examine tissue chemically for mineral poisons." Substance of wall—thickness. wounds. perforation. rupture. adhesion. constriction. weight. examination for poisons.

402. *Cardiac opening:*—constricted or not? cause of constriction;—condition of epithelium. Cardiac opening.

403. *Pylorus:*—abnormally open; constricted; constriction overcome or not by slight force?— Pylorus—openness. constriction.

mucous membrane.
submucous coat.
muscular coat.

opening smooth or fissured round edges?—Mucous membrane; its condition (595); puckered or not?—Ulcer (624).—Submucous coat; its condition (596).—Muscular coat; thickness as measured; degree of visibility of muscular fibres; of different layers of fibres;—presence between the fibres of adventitious products; colloid, encephaloid, scirrhous or common exudation matter; their microscopical characters.

*Intestines generally.*

## *Intestines generally.*

[The following particulars are to be noted throughout the canal, but it is to be specified in which division each is observed, whether in the duodenum, jejunum, ileum, cæcum, colon (ascending, transverse, or descending), sigmoid flexure, or rectum.]

External characters—position. hernise.

404. *External characters.—Position:* in relation to general cavity of abdomen; to adjoining parts and organs;—in *herniæ*, external or internal; degree of constriction undergone by bowel; appearance of constricted part, of part involved in hernia; condition of parts above and below hernia (contracted, dilated, etc.);—cause and nature of constriction; an intestinal diverticulum, adhesions, holes in the mesentery, bands and cords formed by omentum, etc.;—twisting of portions of intestine; form and precise characters of affected portion.—

invagination.

*Invagination:* number of invaginations; situation; size; direction, upwards or downwards? ease with which reduced;—condition of serous membrane (598), of mucous membrane (595) (distinguishing

the separate layers of the invagination); color, thickness, consistence; lymph, pus, adhesions, etc.; —condition of mesentery included within sheath. —*Calibre:* in general terms.—Special dilatation or contraction; extent of affected portion;—circumference of normal, dilated, contracted, or constricted portions; of intestine above and below contracted or dilated portion;—is contraction partially or entirely removed by stretching?—apparent cause of constriction; abnormities external to canal, in walls of canal itself;—condition of coats at, below, and above constricted or dilated portion (406 *et seq.*); degree of visibility of muscular fibres.—*Diverticula:* number; situation at distal or attached side of intestine? shape; size; structure;—presence or absence of fibrous cord? its length;—contents. —*Adhesions* (605, 408). —*Peritoneal coat;* its condition (598);—relation of abnormal appearances, in respect of position, to morbid states of mucous membrane.

calibre. dilatation. constriction. diverticula. adhesions. peritoneal coat.

405. *Contents.—Gas:* quantity; odor and other characters.—*Mucus:* quantity; color; transparency; consistence; reaction; adhesion to mucous membrane.—*Blood:* mixed with feces or not? quantity; fluid or coagulated? color;—apparent source, if discoverable.—*Pus:* quantity; apparent source.—*Fecal matter:* quantity; aeration; color; consistence; indurated scybala.—"*Meconium*"—*Foreign substances:* indigestible alimentary matters (*e. g.*, cherry or plum stones); concretions, their size, form, constituents; portions of non-alimentary substances, their form and physical characters; biliary calculi;—"poisonous matters; distinguishable by physical characters; ascertained by chemical analyses."—*Entozoa:* number and character.

Contents— gas. mucus. blood. pus. fecal matter. meconium. foreign substances. poisons. entozoa.

Mucous membrane—secretions on surface.

406. *Mucous membrane.—Secretions, etc., on surface* (594); limited or not to border of valvulæ conniventes? to Peyer's patches? to prominent folds of large intestine?—if a patch of lymph is linear, does its long axis correspond with that of intestine, or is it disposed circularly?—*Condition of membrane* (595).—*Submucous tissue;* its condition (596).

condition of membrane.

submucous tissue.

Muscular coat.

407. *Muscular coat:*—thickness; alterations in thickness (general or partial), especially in parts altered in calibre (404);—development of longitudinal fibres; of circular fibres.

Substance of wall—

thickness.

wounds.

perforation.

rupture.

adhesion.

408. *Substance of wall of intestine:*—transparency, when held between observer and the light;—thickness (measured in various parts), especially in parts altered in calibre (404).—Wounds (626 *et seq.*).—Perforations (625): exact situation, near attached or distal side of tube.—Rupture; its seat, extent, direction, etc.—If adhesion be observed between intestine and any other part, note if it corresponds in position with ulcers, cicatrices, perforations, or abnormal growths or deposits.—"In cases of suspected poisoning, examine tissue chemically for mineral poisons."

examination for poisons.

*Special portions of Intestines.*

*Special portions of Intestines.*

Duodenum—Brunner's glands.

409. *Duodenum.—Brunner's glands:* degree of development;—if there be ulceration, note the relation of smallest ulcers to orifices of glands.—*Ductus communis:* condition of orifice;—permeability of common and biliary ducts.

ductus communis.

Jejunum and ileum—valvulæ conniventes.

villi.

410. *Jejunum and ileum.—Valvulæ conniventes:* "present or absent?" size; peculiarities;—extent of intestine occupied by them.—*Villi:* degree of

development; color.—*Peyer's patches:* number; situation;—matters adhering, mucus, phosphates, etc. (594);—degree of visibility; level at, above, or below that of adjacent membrane?—rugæ; pits; sacculi;—deposit; its color, consistence; in separate points, in one layer; situation, on mucous membrane, in sacculi, in submucous tissue, in muscular tissue, in sub-peritoneal tissue, in several or all of the above;—color of patch (595), condition of vessels, etc.;—transparency, of patch, of tissues around;—consistence; length of strips obtainable from mucous membrane; adhesion between coats of intestine in situation of patch;—ulcers (624); sloughs (618 *et seq.*); cicatrices (629); puckering—condition of peritoneum corresponding to patch.—*Solitary glands:* number; situation; degree of prominence;—deposit; color; ulcers, etc.—*Crypts of Lieberkühn:* degree of visibility; color.

Peyer's patches.

solitary glands.

crypts of Lieberkühn.

411. *Cæcum:*—situation; extent uncovered by peritoneum; —gelatinous softening. — *Appendix vermiformis:* situation; length; calibre; adhesions; contents; perforation; ulcers, etc.—*Ileo-cæcal valve:* hypertrophy, etc.—Are morbid states of cæcum or ileum arrested at the valve?

Cæcum—

appendix vermiformis.

ileo-cæcal valve.

412. *Colon:*—position and course.—*Solitary glands:* degree of visibility; prominence; color; induration;—ulceration (624); size of ulcers; situation, at apex or base of glands?—sloughing (618 *et seq.*); size of slough; situation in reference to glands.—*Ulcers* unconnected with solitary glands (624); if oval, direction of long axis;—situation with reference to prominent folds in colon.—Relative number of ulcers in cæcum and other parts of colon.

Colon—

solitary glands.

ulcers.

Rectum.

413. *Rectum:*—hemorrhoids; their anatomical characters;—prolapsus; its extent; condition of prolapsed portion of bowel.

*Liver.*

*Liver.*

External characters. position.

414. *External characters.*—Absent?—number; —malformations;—position in respect of cavity of abdomen generally, and with relation to other organs; extent uncovered by cartilages of ribs.—

adhesions.

*Adhesions* (605); their length and the relation between their diaphragmatic and hepatic attachments; —if surface of liver be irregular, are adhesions attached to depressed or elevated portions?—

weight.

*Weight* (with gall-bladder attached, but emptied).—

measurements.

*Measurements:* transverse; antero-posterior (from rounded to thin edge); of greatest thickness.—

form.

*Form:* generally;—acute margin; thick, thin, rounded, irregular; reduced to a fibro-cellular band,

surface.

depth to which this band extends inwards.—*Surface* (noting particulars with respect to superior surface, inferior surface, acute margin, on and between the lobules, etc.): color generally, or in various parts of surface, in elevated or depressed portions; — depressions; size, form, color, etc.; corresponding or not to ribs? — pits produced by pressure;—elevations; size, form, color, consistence, etc.;—lobulation; its physical cause;—puckerings;—opacities, linear or racemose? their direction;—roughness, its physical cause;—granulations, their situation, size (uniform or not?), color, compound or single?—cysts (634); tubercle (644), etc.

Capsule—

415. *Capsule* (noting various parts of surface): —lymph on surface; pus on surface;—polish;

surface.

thickness.

transparency; vascularity;—thickness;—fragility;

—elevation of capsule; by air, serosity, pus, blood; facility with which detached from hepatic substance; amount of hepatic substance removed with capsule: condition of hepatic surface after removal of capsule; smoothness; color;—condition of substance subjacent to morbid alterations of capsule or adhesions. detachment. hepatic surface after removal.

416. *Substance:*—cut surface; degree of moisture or dryness? flaccidity; fragility; aspect of fractured surface?—color; relative position of yellow and red substances; their relative proportion; —transparency;—consistence; specific gravity;—emphysema;—fluids expressible;—hemorrhage into substance.—*Lobules:* degree of separation; mode of separation;—situation of red and yellow substance in separate lobules.—*Granulations:* number; size; color; structure.—*Cicatrices* (630): relation to branches of portal vein, of hepatic duct; to abnormities seen on surface—*e. g.* puckerings, opacities, etc.—*Pus* in detached points; number, size, form, and arrangement of the points; condition of tissue around them;—abscesses (606 *et seq.*); connection with, or openings into surrounding parts; ducts opening into them; tissue surrounding them; evidence of contraction;—fistulæ (613 *et seq.*)—*Calcareous matter:* number of deposits; situation; size;—relation to the several elements of liver, *e.g.*, lobules, ducts, and veins.—*Gangrene* (618 *et seq.*) —*Growths:* lipoma; cancer (638 *et seq.*)—*Tubercles* or tubercular matter (644).—*Cysts* (634 *et seq.*): hydatids.—*Wounds* (626 *et seq.*)—*Rupture:* number of fissures; extent; situation; depth; direction; condition of edges, etc.—*Microscopical examination*, of lobules, etc. Substance— lobules. granulations. cicatrices. pus. abscesses. fistulæ. calcareous matter. gangrene. growths. tubercle. cysts. wounds. rupture. microscopical examination.

417. *Veins:*—*Portal vein:* (see *Veins*, 474 *et seq.*;)—malformations;—*ductus venosus*, open or Veins— portal. ductus venosus.

umbilical.

closed? if open, its calibre, contents, thickness of coats, condition of interior;—*umbilical vein*, open or closed? if open, its calibre, contents, thickness of coats, etc.—*Divisions of portal vein:* their condition;—relation of branches to linear opacities, puckered spots, abscesses, cicatrices, gangrene, etc.

hepatic.

—*Hepatic vein* (for particulars, see *Veins*, 474 *et seq.*).

Hepatic ducts.

418. *Hepatic ducts:*—contents;—calibre; contracted, obliterated, dilated; seat and extent of the above changes;—thickness of wall;—mucous membrane (594 *et seq.*).—Divisions of ducts; relation to puckered spots, cicatrices, abscesses, etc.

*Gall-bladder.*

*Gall-bladder.*

External characters.

419. *External characters:*—absent? size; shape; color of surface; adhesions (605).

Cavity—contents.

420. *Cavity:*—obliterated?—*Contents:* air;—bile; its amount, color, consistence, odor, taste, specific gravity, reaction, chemical and microscopical characters;—calculi; attached or not to bladder? in what way?—number, size, situation, form, surface, color, section, chemical and microscopical characters;—serous fluid; mucus; pus, etc.

Walls—

421. *Walls:*—thickness; transparency; œdema; emphysema; adipose deposit; cretification; tubercle; cancer;—wounds; rupture.—*Mucous membrane* (594 *et seq.*).

mucous membrane.

Ductus communis choledochus—calibre.

422. *Ductus communis choledochus:*—calibre;—abnormal contraction or dilatation; their seat and extent;—impervious; from what cause? pressure externally from enlarged glands, pancreas, etc., adhesion of walls, contraction, obstruction by calculus, etc.?—condition of duct above and below

point of contraction or obstruction;—orifice (409). —Contents of duct;—condition of walls (as 421); condition of mucous membrane (594 *et seq.*)—*Cystic duct* (as *Ductus communis*).

contents.
mucous membrane.
cystic duct.

## *Spleen.*

*Spleen.*

423. *External characters:*—absent?—number; —splenculi, their size, shape, and mode of attachment to spleen (if any);—malformations;—position, in respect to cavity of abdomen generally, and in respect to other organs.—*Adhesions* (605).—*Weight.* — *Measurements:* length, breadth, and thickness.—*Form:* surface.—*Capsule:*—lymph or false membranes on surface (603); smoothness; polish; roughness, its physical cause; corrugation; color; transparency.—Thickening, general or partial? extent; form; depth; consistence;—facility of detachment.

External characters—
weight.
measurements.
form.
capsule.

424. *Substance:*—cut surface; degree of moisture or dryness; color;—consistence; fragility; aspect of fractured surface;—number of white spots visible; their size, etc.—Wounds (626); rupture; abscesses (606 *et seq.*); tubercle (644); cancer (638 *et seq.*); gangrene (618 *et seq.*); cysts (634 *et seq.*).—*Microscopical examination* of pulpy matter; of white spots, white transparent crystals present or not? if present, their exact characters.

Substance.
microscopical examination.

## *Pancreas.*

*Pancreas.*

425. *External characters:*—absent?—malformations;—position; relation to other organs of abdomen.—*Adhesions* (605).—*Weight.*—*Measurements.* —*Form:*—surface.

External characters—
weight.
measurements.
form.

Substance.

426. *Substance:*—cut surface; degree of moisture or dryness; color; consistence; degree of separation of lobules; color of lobules; condition of interlobular tissue;—wounds; abscesses (606 *et seq.*); cretaceous masses; tubercular-like matter (644); cancer (638 *et seq.*); cysts (634 *et seq.*).

Duct.

427. *Duct:*—calibre;—dilatation, general or partial?—contraction or obliteration; its seat; physical cause;—contents; calculi, pus, blood, etc.—Walls (as 421);—fistulæ (613 *et seq.*); with what communicating?

§ II. E.

## E.—ORGANS OF RESPIRATION.

External characters of thorax.

428. *External characters of thorax.*—(158 *et seq.*)

*Pleuræ.*

### *Pleuræ.*

Contents.

429. *Contents:*—(597.)—Blood; when supposed due to a wound, examine condition of intercostal arteries.

Condition of membrane.

430. *Condition of membrane:*—(598.)

Sub-pleural tissue.

431. *Subpleural tissue:*—(599.)

Subjacent parietes.

432. *Subjacent bony and muscular parietes of thorax:*—(368, 370.)

*Nares.*

### *Nares.*

Malformations and foreign bodies.

433. *Malformations.—Closure.—"Foreign bodies:* their situation, nature, degree of impaction."

Bones.

434. *Bones:*—their condition (370).

Mucous membrane.

435. *Mucous membrane:*—(594 *et seq.*)

*Larynx, Trachea, and Bronchial Tubes.*

436. *Generalities.*— Position;—malformations;—shape; size.—*Mucous membrane:* its condition (594 *et seq.*)—*Wounds* (626 *et seq.*)—*Contents:* foreign bodies; mucus; lymph (603); puriform matter (602), blood, etc.—their amount; degree to which they occupy the several cavities; their degree of adhesion to subjacent mucous membrane.

437. *Larynx.—Epiglottis:* shape; surface (upper and under), inequalities of them; color; thickness, thickening due to condition of mucous membrane or of submucous tissue? œdema; ulcers (624); sloughs (618 *et seq.*)—*Superior aperture of larynx:* size.—*Aryteno-epiglottidean folds:* color; thickness; transparency; œdema; adherent secretions; ulcers; sloughs; polypi;—submucous tissue; its condition (596); fluid contained in its meshes.—*Ventricles of larynx* and *sacculi laryngis:* condition of mucous membrane (595); œdema, etc.—*Rima glottidis:* size and shape; plug of mucus or other body present?—*Chordæ vocales:* extent to which they are in apposition; their thickness, color;—œdema; ulcers (624), sloughs (618 *et seq.*), are these on edges of chordæ vocales or not?—*Muscles of larynx:* color; size; consistence; fluids infiltrating them.—*Cartilages of larynx:* condition of perichondrium (especially of parts beneath ulcers of mucous membrane); denudation of cartilages; ossification; caries; necrosis.—*State of parts adjacent* to external surface of larynx.

438. *Trachea.*—Mucous membrane (594 *et seq.*); diverticula; tubercle, etc.—*Contents* (436): "mucous froth, size of vesicles."—*Cartilages of*

*Larynx, Trachea, and Bronchial Tubes.*
Generalities: position, etc.
mucous membrane.
wounds.
contents.
Larynx—epiglottis.
superior aperture of larynx.
aryteno-epiglottidean folds.
ventricles.
rima glottidis.
chordæ vocales.
muscles.
cartilages.
adjacent parts.
Trachea—mucous membrane.
contents.
cartilages.

*trachea;* degree of resistance or brittleness; degree to which denuded of mucous membranes; ulceration; ossification.

Bronchial tubes—contents.

439. *Bronchial tubes.*—*Contents* (436); in larger or smaller divisions of tubes? "water (its amount);" degree to which they are filled; lymph on surface, occupying or not whole circumference of tubes? rendering them impervious to air (note state of pulmonary tissue to which impervious bronchial tubes lead, 442)?—*Diameter* of bronchi and their divisions; form, compressed or narrowed by tumor, etc. externally.—*Contraction or dilatation;* number and extent of contracted or dilated parts;—measurements of tube above, at, and below contracted and dilated parts;—their form;—contents of dilated part and of tubes leading to or from it;—their walls thicker or thinner than natural, etc.? condition of mucous membrane of the parts (594 *et seq.*): condition of pulmonary tissue around them, absolute and comparative; state of pleura over dilated portions;—relation between dilated portions and thoracic parietes; thickness of intervening lung substance.—*Walls of tubes;* thicker or thinner than natural?—perforation of them, communicating with other parts? size and shape of opening (direct, oblique, valvular), amount of intervening lung substance.—*Cartilages;* ulceration; ossification.—*Mucous membrane* (594 *et seq.*).

diameter.

contraction. dilatation.

walls.

cartilages. mucous membrane.

*Lungs.*

*Lungs.*

(Facts to be noted in respect of each lung separately.)

Examination in situ—position.

440. *Examination in situ:*—position; degree of collapse; amount to which pericardium is uncover-

ed;—adhesions (605);—wounds (626); rupture; fistulæ (613 *et seq.*).

adhesions. wounds, etc.

441. *External characters.*—Weight "of both after tying vessels, with trachea and bronchi attached;" of each separately, before and after escape of fluid; number of cubic inches of water displaced? Form when laid on the table;—number of lobes, any peculiarity in their shape? adhesion of lobes;—puckering at apex or at any other part;—"visibility of air-cells;"—shape of margin of lung, anteriorly, at base.—Color externally (noted as soon as possible after opening the thorax); shape and position of discolored portions, and relation between them and any solid portions of lung;—amount and position of pulmonary black matter.—Appearance of lungs as if macerated.—Degree of compressibility; resiliency; flaccidity; sensation of solidity imparted to fingers; crepitation; are the solid or the crepitant portions the more prominent?—relation between the solid portions and disease of pleura.—Effect of inflation on color and other characters of previously solid portion.—Emphysema; interlobular; vesicular; size, shape, prominence, etc., of air-cells;—thickness of tissue between the fingers after expression of air and fluid.—Seedlike bodies; their situation, color, consistence, etc.—Tuberculous-looking masses (644); relation to pleura, etc.—Cancerous-looking masses (638 *et seq.*).

External characters—weight, etc.

form.

color.

compressibility, etc.

crepitation.

effect of inflation.

emphysema.

seedlike bodies.

tubercle.

cancer.

442. *Substance of lung:*—consistence; flaccidity; fragility, under pressure of fingers, tearing, etc.; carnified appearance; smoothness; granular appearance and color of cut or torn surface (before and after pressure).—*Fluid exuding* on section of different parts, especially of most dependent part, apex, etc.; its amount, color, degree of aeration,

Substance—consistence.

surface of section.

fluid exuding.

crepitation. etc.—*Crepitation;*—its degree.—Any partially crepitant or non-crepitant portions? their size, shape, outline;—relation to each other, to pulmonary substance, to interlobular septa;—condition and contents of bronchial tubes and pulmonary vessels leading to and through them, compared with those in other parts of same lung;—condition of lung substance immediately adjacent.—*Abscess* (606 *et seq.*)—*Gangrene* (618 *et seq.*)—*Vessels* of lung, their condition.—*Foreign bodies* in lung; condition of tissue immediately surrounding.

abscess.

gangrene.

vessels.

foreign bodies.

Extravasation of blood. 443. *Extravasation of blood:*—extent of lung implicated;—masses of hemorrhagic effusion; their number, size, and shape; degree of circumscription; gradually blending with surrounding lung substance; confined to certain lobules; consistence of masses, hard or pulpy? their color, dark purple, brightish red, etc.; appearance of section, granular or smooth? appearance of cut surface after being scraped by scalpel;—degree to which parenchyma of lung is broken down;—is effusion surrounded by a cyst?

Adventitious products—cretaceous bodies. 444. *Adventitious products.—Cretaceous bodies;* at what part of lung situated, near surface or not? their color, size, shape, consistence, fragility; softer at centre or externally?—condition of surrounding parts, pulmonary or pleural.—*Tubercles* or tuberculous-looking matter:—seat; amount and distribution, isolated, scattered, clustered, etc.; size, color, and form; transparent or opake? opake at centre and transparent at edges, or the reverse? consistence, etc. (644).—Condition of interstitial and surrounding tissue, natural, indurated, congested, emphysematous; its color, etc.—*Cancer* or cancerous-looking matter (638 *et seq.*).

tubercles.

cancer.

445. *Cavities:*—seat; relation to surface;—size; shape; distinct or communicating?—contents; puriform matter, softened tubercle, cretaceous masses, blood;—crossed or not by septa or bands? nature of these, do they contain vessels and are the vessels pervious?—communicating or not with bronchial tubes? mode of termination of bronchial tubes, relation of orifice of tube to contents of cavity.—Walls of cavity; condition, smooth, irregular, coated with lymph, sloughy;—condition of tissues surrounding cavity;—relation of cavity to adhesions, thickenings, etc. of pleura.—*Cysts:* relation to bronchial tubes, pulmonary substance and vessels of lung;—size;—thickness of parietes, contents, etc. (634).

Cavities—seat. size, etc. contents.

relation to vessels and bronchiæ.

walls.

cysts.

446. "*Hydrostatic test:*—results of placing lungs, bronchi, and trachæa together in water (noting its temperature and source); do they sink or float? if they sink, do they fall slowly or rapidly?—Results with each lung separately.—Results with portions of each lung; if any of them float, do they rise above surface of water, or float below it or at its level? do they float after compression? do bubbles of air rise on compressing portions under water?"

Hydrostatic test.

*Diaphragm.*

*Diaphragm.*

447. *Position:*—on both sides; height to which it rises into chest;—apertures (625); herniæ; wounds (626), etc.—*Substance:* serous surface (597 *et seq.*); muscular and tendinous tissues (368, 369).

Position—

substance.

§ II. F.

## F.—ORGANS OF CIRCULATION.

*Pericardium.*

### *Pericardium.*

External characters.

448. *External characters:* — shape; measurements from above downwards, and transversely; extent uncovered by lungs.—Vascularity of surface; effusion of serosity, pus, or fibrinous exudation on surface; cancerous-looking matter (638 *et seq.*); tubercle (644).—Amount of fat on sac.—Wounds (626).

Contents.

449. *Contents* (597).

Internal surface—adhesions. white spots.

450. *Internal surface* (598 *et seq.*)—*Adhesions:* extent and other characters (605).—*White spots* on serous membrane; their locality, shape, size, thickness;—flocculent or smooth?—facility of detachment.

*Heart.*

### *Heart.*

Examination in situ—position.

451. *Examination in situ:*—exact position; point of thoracic parietes to which apex and right and left borders correspond;—relation of heart to liver;—direction of axis of heart.—Shape; extent of left ventricle seen; degree of distension of right auricle.—Measurements; from extreme base to apex; from auriculo-ventricular groove to apex; transverse measurement at auriculo-ventricular groove.—General estimate of rigidity or flabbiness of tissues.

shape.

measurements.

consistence.

Examination after removal—blood in venæ cavæ.

452. *Examination after removal:*[1]—Amount of blood discharged from superior and inferior venæ

[1] The venæ cavæ being supposed to be cut through close to the auricle, the aorta and pulmonary arteries just above the free edges of the valves.

cavæ;—kind of blood, liquid, mixed with gas, coagulated, large pale clots, etc. (476).—Shape of heart when removed, rounded, elongated; apex formed by right or by left ventricle? apparent relative size of right and left ventricle; if either ventricle be contracted, note its capability of dilatation.

shape.

size of ventricles.

453. *Right auricle:*—quantity of blood contained in cavity;—its condition, liquid, frothy, coagulated; its color, etc. (476);—general estimate of the size of cavity after removal of blood.—*Lining membrane:* smoothness, polish, transparency, color, thickness;—deposition upon it, in granules, layers, etc.; deposit below membrane, its characters;—ecchymoses;—ulcers and sloughs of lining membrane.—Condition of *foramen ovale;* of orifices of venæ cavæ; of mouths of coronary veins.—*Muscular* walls; thickness, color, consistence; condition of musculi pectinati;—extent to which encroached upon by external deposition of fat;—fatty streaks; mottling and yellow spots among fibres;—ecchymoses; hemorrhage; pus; fibrous tissue.

Right auricle: blood contained. size of cavity. lining membrane. foramen ovale. muscular walls.

454. *Right auriculo-ventricular opening:*—its shape as viewed from above;—apparent diameter when stretched to a round shape;—rough estimate of its size, by introducing fingers; size as measured by a graduated cone;—projections, calcifications, etc., on auricular surface of ring; extent to which opening is diminished by them;—circumference of ring (as measured after cutting through it and stretching it out without using much force).[1]

Right auriculo-ventricular opening— form. size. projections. circumference.

455. *Right ventricle:*—amount and characters

Right ventricle—

[1] The best mode of measuring the several openings is by means of a wet piece of string, which will follow the inequalities of the opening.

blood contained.
size of cavity.
lining membrane.
muscular walls.
columnæ carneæ.
chordæ tendineæ.
Tricuspid flaps— thickness. granulations, etc. length, etc.
Sinus arteriosus.
Pulmonary opening— shape, etc. efficiency of valves.
circumference.

of blood contained in cavity (476); attachment of coagula to lining membrane and interlacement among columnæ carneæ;—general estimate of size of cavity;—its general shape;—length of interior from centre of auriculo-ventricular ring to apex;—extent to which septum bulges into cavity.—*Lining membrane:* smoothness, polish, transparency, color, thickness;—depositions upon it;—ecchymoses;—readiness of detachment of membrane from muscular fibres.—*Muscular walls:* thickness at base, middle, and apex; color; consistence; mottling or streaking as seen before and after removal of endocardium;—size of *columnæ carneæ;* condition of *chordæ tendineæ,* their length, flexibility, thickened or not at point of attachment to valves?—softening; rupture, its extent, situation, etc.;—ecchymosis; hemorrhage; pus; fibrous tissue, etc.

456. *Tricuspid flaps:* — natural, thickened, thinned, contracted;—presenting granulations or vegetations;—shortened; rolled back; length of flaps.—Can the auriculo-ventricular opening be closed? if not, is this due to shortness of chordæ tendineæ, or to what other cause?

457. *Sinus arteriosus:*—its size, shape;—deposition upon its lining membrane.

458. *Pulmonary opening:*—its shape as seen from below;—smoothness of ring, of ventricular surface of flaps;—exudation upon or shrinking and apparent incompetency of flaps; does water pass through when poured into pulmonary artery? and if so, does it pass freely or in drops? apparent size of abnormal opening;—circumference of opening (as measured at the attached border of valves, after opening the artery and stretching out the ring without force).

459. *Pulmonary valves* (viewed from pulmonary artery):—their smoothness; color:—thickening, or irregularity, their cause; contraction; reticulation;—competency.—If there be any malformation, etc. of flaps, note their number, size, thickness, power of closing, opening, condition of corpora Arantii, etc.

Pulmonary valves. smoothness, etc. irregularity, etc. competency. malformation.

460. *Left auricle:*—particulars as right auricle (453), pulmonary veins being of course noted instead of venæ cavæ and coronary veins.

Left auricle.

461. *Left auriculo-ventricular opening:*—appearance when looked at from above; size and shape of opening; rough estimate of size by introducing fingers; size as measured by graduated cone;—circumference of opening (measured after ventricle has been opened).

Left auriculo-ventricular opening—size, etc. circumference.

462. *Left ventricle:*—particulars as right ventricle (455).—*Septum ventriculorum:* thickness at base, middle, and apex;—deficient, entirely or partially?—if presenting an aperture, its size, thickness, and character of edges, etc.

Left ventricle. septum ventriculorum.

463. *Mitral flaps;*—their size;—apparent competence or the contrary, cause of incompetency;—color; smoothness; polish;—thickening; retraction; adhesion; deposits upon or into them, etc.

Mitral flaps—size, etc. thickening, etc.

464. *Aortic opening:*—particulars as *Pulmonary opening* (458).

Aortic opening.

465. *Aortic valves:*—particulars as *Pulmonary valves* (459).

Aortic valves.

466. *Coronary arteries;* their size;—atheroma or calcification of them;—obstruction from coagula, etc.

Coronary arteries.

467. *Substance generally:*—*Weight* (the heart being supposed to be taken out as directed in the note, p. 154, and all blood and coagula to have been

Substance—weight.

wounds. growths. malformations. microscopical examination.

removed).—*Wounds* (626 *et seq.*)—*Growths;* their locality, size, etc. (651 *et seq.*); effect on shape of heart and condition of cavities.—*Malformations;* their special description.—*Microscopical examination* of contained blood, and of the several cardiac structures.

*Arteries.*

*Arteries.*

Examination before opening vessel.

468. *Examination before opening vessel:*—malformations;—size; course;—condition of external coat and of tissues around it; vascularity; exudation (pus, etc.).

Examination after opening vessel—contents.

469. *Examination after opening vessel:*—contained blood, its quantity, color, etc. (476), coagulated or not?—degree of adhesion of coagula to lining membrane; color, consistence, presumed age and arrangement of coagula.—Size of vessel after detachment of clots; transverse measurement, when opened and laid flat;—general thickening; rigidity or flaccidity of walls.—*Lining membrane:* its color; tint uniform, in patches, in streaks (on anterior or posterior wall?); — transparency; smoothness; polish;—readiness of detachment from middle coat; —thickness;—fissures; ulcers.—Inequalities on lining membrane; in points, patches, or ridges; their size, shape, degree of elevation;—their apparent cause, as atheroma, calcification, fibrinous effusion, gelatinous effusion;—exact relation of the above to the internal coat, upon it, below it but incorporated with it, below it but easily separated from it, below with partial destruction of it.—*Middle coat:* its thickness; color; connection with lining membrane;—deposit between middle and internal coats; deposit in middle coat, its color, con-

size, walls. lining membrane. middle coat.

sistence, and apparent nature (*supra*);—blood between middle and inner or outer coats.—*External coat:* its thickness; color, etc. — external coat.

470. "*Ductus arteriosus:*—condition, open or closed?—diameter, at commencement, middle, and termination;—condition of interior; thickness of wall," etc. — Ductus arteriosus.

471. *Microscopical characters* of normal and abnormal arteries; of their several structures; of contained blood. — Microscopical characters.

*Dilatations of Arteries and Aneurisms.* — *Dilatations of Arteries and Aneurisms.*

472. *External characters:*—size (as expressed in general terms and by measurement); shape, globular, pyriform, etc.—Relation to the vessel, whether a general dilatation or a lateral detrusion? if a lateral detrusion, note exact point of vessel from which it arises, and whether anteriorly, posteriorly, or laterally? — Sensation of thickness, thinness, density, fulness, emptiness, etc., given to hand.—Relation of surrounding parts to enlargement; are they adherent or not to enlargement?—Openings as seen externally; their position, size, depth;—free or blocked up by coagula? degree of freedom with which a probe enters;—effusion of blood from opening, its quantity, position, etc. — External characters— size. shape, etc. feel. openings.

473. *Characters after opening dilatation:*—contents; blood, liquid or coagulated?—layers of fibrin; their number, thickness; color and density (absolute and relative) of outer and inner strata.—Size and shape of cavity in which liquid blood was free to move.—Opening from artery into cavity; size; shape; straight or oblique?—characters of lips of opening; shape, thickness, hardness; appa- — Characters after opening— contents. size of cavity, etc. opening into artery.

rent effect on entrance or exit of blood; apparent capability of being thrown into vibrations by its

inner surface.

entrance or exit.—Inner surface of cavity; how constituted? by lining membrane of vessel, by adventitious membrane, by coagula or fibrin? rough;

walls.

smooth; calcified, etc.—Walls of dilatation, how constituted? by all or by one or more of the coats? —state of coats forming boundary; separated, amalgamated, thickened, thinned, atheromatous,

lining membrane.

calcified, etc.—Condition of lining membrane in vicinity of opening into artery; smooth, rough, atheromatous;—does lining membrane appear to cease at orifice of aneurism or to be continued into

artery above and below.

it?—Size of artery above and below aneurism;—

microscopical characters of coats.

effect of aneurism on branches of artery.—Microscopical characters of arterial and aneurismal coats.

*Veins.*

## *Veins.*

Examination before opening— size, etc. feel. exudations.

474. *Examination before opening vessel:*—size and general appearance; bulging, thickening; color; vascularity;—feel to hand, hard, corded, thin, full, empty;—exudation upon and into outer coat, fibrin, pus, etc.

Examination after opening— contents.

475. *Examination after opening vessel.*—Contents of vessel; blood, liquid or coagulated? its color;—fibrinous matter; its color, consistence, adhesion to lining membrane;—pus or puriform-looking fluid, its microscopical characters (645 *et seq.*).—Calibre of vessel; if small, due to contraction of vessel or to deposit on lining membrane?—

calibre.

lining membrane.

*Lining membrane:* color, uniform or in patches? depth and uniformity of tint;—smooth; rough; apparent cause of roughness; size of elevations; their color, consistence, degree of adherence;—

polished; dull; tarnished.—Consistence of membrane; its thickness or thinness; its degree of adherence; softening; laceration; fissuring; rupture.—*Valves:* condition as to thickness, color, shape, and competency.—*Abnormal communication between an artery and vein:* communication by a direct or oblique opening? immediate or by a sinus? size of opening;—condition of arterial and venous wall of orifice;—size of vein and artery at affected point.—*Phleboliths:* their number; size; free or attached, and in what manner? relation to lining membrane;—microscopical and chemical characters.

valves.

communication with artery.

phleboliths.

*Blood.*

*Blood.*

476. *Physical characters:*—color; consistence;—fluid or coagulated?—characters of coagulum; its form, size, consistence (uniform or not?) color (uniform or not?); relative amount and consistence of pale and dark portions; position of pale and dark portions in relation to one another and to posture of body;—microscopical characters (645 *et seq.*);—chemical characters.—"Examination for poisons."—Blood mixed with gas; amount and nature of gas; vessels in which found.

Physical characters.

## G.—LYMPHATIC SYSTEM.

§ II. G.

*Lymphatic Glands.*

*Lymphatic Glands.*

477. *Characters observed before section:*—size; color; consistence; flaccidity, etc.;—condition of capsule;—condition of tissue in which they are imbedded.

Characters before section: color, etc. capsule.

478. *Characters observed after section:*—color of surface; amount and situation of black matter;

Characters after section: color, etc.

—general aspect of cut or of fractured surface;

consistence. tubercle. cancer. fluid exuding.

consistence, soft, hard, calcified;—containing tuberculous-like matter (644); containing cancerous-looking matter (638 *et seq.*);—character of fluid exuding from cut surface on pressure, to naked eye and under microscope.

Special glands: cervical. axillary. inguinal.

479. *Special lymphatic glands.* — *Cervical glands:* part and side of neck on which diseased glands are situated.—*Axillary glands.*—*Inguinal glands:* above or below Poupart's ligament?—Appearance of skin covering these several groups of glands;—openings from the glands on surface of skin; discharge from openings or not? characters of discharge (601, 602).—*Bronchial glands.*—*Mesenteric glands:* number visible; relation of enlarged glands to particular portions of intestines or to diseased conditions of them.—*Lumbar, iliac, and sacral glands.*

bronchial.

mesenteric.

lumbar, etc.

*Lymphatic Vessels.*

## *Lymphatic Vessels.*

size. consistence, etc. lymph.

480. Size of vessels;—thickness, consistence, and color of coats;—amount of lymph contained within them; its degree of fluidity; transparency or turbidity; its color; microscopical characters;—

skin, etc. over.

color of skin in course of lymphatics; abscesses in connection with them.

*Lacteal Vessels.*

## *Lacteal Vessels.*

481. For particulars, see *Lymphatics* (480).—Contents of vessels; degree of fluidity, etc.

## H.—URINARY ORGANS. § II. H.

### *Kidneys and Ureters.*

482. Absence of both kidneys, or of either?—Number of kidneys?—Kidneys united? — Absence, etc.

(The following facts are to be noted in respect of each kidney separately.)

483. *External characters:*—degree of development; position; form;—size, extreme length, extreme breadth, extreme thickness;—weight after removal of capsule;—amount of fat at hilus;—wounds (626 *et seq.*); rupture. — External characters— position. size, etc. weight. fat, etc.

484. *Capsule:*—transparency; vascularity; consistence; thickness;—facility with which removed from cortical substance; readily separable or not into layers? portions of cortical substance removed or not with the capsule? number, size, and shape of portions of cortical substance removed. — Capsule.

485. *Surface of kidney after removal of capsule,* (noting differences, if any, on anterior and posterior surfaces):—smooth; lobulated, size of lobules; puckered; situation, shape, size, and color of puckered spots;—presenting depressed spots; situation, shape, size, and color of depressed spots; adhesion of capsule to these spots;—granulated; situation, size, and color of granulations; color of intergranular substance.—Color of surface of kidney; grayness of surface; its depth, situation, shape, extent; pallor, its tint; marbling; redness, dependent on staining or vascularity? venous polygons; stellate injection; punctiform redness (size of punctæ).—Cysts (634 *et seq.*). — Surface. cysts.

Substance.

486. *Substance of kidney:*—consistence, flaccidity, fragility;—fracture, granular or not?—wounds (627); rupture.

Cut surface—
fluid exuding.
color, etc.

487. *Cut surface:*—amount of blood or serosity exuding from cut surface; presence of fat on surface of exuding fluid?—general hue of cut surface; relative hue of cortical and pyramidal portions; line of demarcation between these portions abrupt or imperfectly marked?—amount of blood in vein at base of pyramids; hue of tissues immediately adjacent to that vein.

Cortical substance—
specific gravity.
breadth.
color.
Malpighian corpuscles.
granulations.
microscopical characters.

488. *Cortical substance:* — specific gravity;—breadth at base of pyramids;—general color; red striæ, their amount, breadth, continuous or made up of separate points? red punctæ; ecchymoses;—Malpighian corpuscles; their degree of visibility; color, pale, red;—granulations, their color, consistence.—Condition of cortical substance subjacent to any puckered spots seen upon the surface.—Microscopical characters.

Pyramidal portion—
striæ.
color.
microscopical characters.

489. *Pyramidal portion:*—degree in which normal striæ are marked; arrangement of striæ in the pyramidal portion, and where this passes into cortical portion; — general color; — white opake streaks; yellow deposit, granular or linear, general or limited to base?—Microscopical characters.

Mammillæ.

490. *Mammillæ:*—their consistence; color; fluid expressible from them; gangrene.

Abnormal growths, etc.
cysts.
fibrinous masses.
tubercle.
cancer.
abscesses.

491. *Abnormal growths and deposits:*—Cysts (634 *et seq.*); their relation to Malpighian bodies.—Fibrinous masses; their size, shape, consistence; color of tissue adjacent, red, gray.—Tubercle (644).—Cancer (638 *et seq.*)—Cretiform matter.—Abscesses (606 *et seq.*)—Microscopic characters of any of the above.

492. *Pelvis of kidney.*—Absent?—Calyces; their length and size;—mode in which ureter opens into pelvis, and whether in a valvular manner or not? loculated, bases of loculi radiated or not?—Contents of pelvis; fluid, its qualities, capable or not of being expressed through the ureter?—solid (calculus), its exact situation, size, surface, structure, etc.—Walls of pelvis; thickness, consistence, transparency, color.—Mucous membrane (594 *et seq.*)—Wounds (626).—Fistulous openings (613 *et seq.*)—If any solid body lie in the pelvis, note the condition of wall and of mucous membrane with reference to its exact seat.

Pelvis of kidney. contents. walls. mucous membrane. openings.

493. *Ureters:*—absence? (if absent, note existence or not of a condensed band of fibrous tissue in its situation);—number;—calibre, if altered at one spot, note condition of tissue adjacent to that spot and calibre of ureter above and below;—contents of ureter; if a calculus, its position, size, surface, etc., condition of mucous membrane in contact with it;—mode in which ureter opens into pelvis of kidney and bladder;—consistence.—Mucous membrane (504 *et seq.*)

Ureters— calibre. mucous membrane.

## *Urinary Bladder.*

*Urinary Bladder.*

494. *External characters:*—Absent?—Malformations.—Adhesions (605).—Size; amount of contraction or dilatation; degree of dilatability;—position of bladder; shape;—diverticula, their seat, size, shape, tissues forming them, contents;—wounds (626).

External characters— size. position. shape. diverticula, etc.

495. *Contents:*—urine, its quantity and physical characters (221);—blood, its amount and characters; pus, etc.;—calculi, their number, size, posi-

Contents.

tion, shape, surface, section, and chemical and microscopical characters;—other bodies.

Walls. 496. *Walls:*—their thickness; condition and thickness of the several coats.—Sinuses.—Perforations (625); rupture, seat, extent, direction; wounds (626); tubercle (644); cancer (638 *et seq.*) —Condition of adjacent tissues and organs.

Mucous membrane. 497. *Mucous membrane* (594 *et seq.*).

*Urethra.*

*Urethra.*

direction. 498. Absence?—malformations;—direction;—

calibre. calibre; contractions and dilatations, their seat, number, mutual relations; condition of several tissues of urethra at the seat of abnormal calibre and

obstructions. of tissues about it;—obstructions of canal, their

wounds, etc. character and cause;—wounds; rupture.

Mucous membrane. 499. *Mucous membrane* (594 *et seq.*):—abnormal appearances uniform or not?—condition of follicles and sinuses;—excrescences, their form, size, color, vascularity, consistence.

Contents. 500. *Contents of urethra.*

§ II. I.

## I.—ORGANS OF GENERATION.

1. FEMALE.

### 1. FEMALE.

*Pudendum.*

*Pudendum.*

Labia, nymphæ, clitoris— 501. *Labia, nymphæ, and clitoris:*—absence? —malformations;—size; color; œdema;—condition of epithelium; abrasion, its extent;—ulceration (624);—secretion covering these parts, its appearance and characters;—abscess (606 *et seq.*); eruption; vegetations; condylomata, their number,

form, and size; tumors (631 *et seq.*); gangrene (618 *et seq.*);—"marks of violence; blood about external genitals; appearances of recent connection." — marks of violence, etc.

502. *Urethral orifice:*—growths within and about it; their size, number, exact seat, elevation, etc. — Urethral orifice.

503. *Hymen:*—absent or present? its precise state, "entire or lacerated? surrounding the entire vaginal orifice or only a part of it? imperforate;—its strength." — Hymen.

*Vagina.* — *Vagina.*

504. Malformations and congenital deficiencies; divided vagina;—elongated; shortened; narrowed; dilated; closed; seat and extent of the above changes; apparent cause of contraction;—direction;—condition of orifice.—Prolapsus; protrusion of either wall, its cause.—Contents of vagina; "foreign substances, their exact situation, size, and other characters; poisonous substances."—Mucous membrane (594 *et seq.*); lying in loose folds;—"do secretions on surface contain seminal animalcules?"—Fissures, or ruptures, their seat, extent, direction, with what part or organ they communicate? wounds (626 *et seq.*); perforations (625);—cancer (638 *et seq.*)—Submucous tissue (596); condition of layer of erectile tissue at lower part of vagina. — Malformations—length. width. — prolapsus. — contents. — mucous membrane. — fissures, etc. — submucous tissue.

*Examination of internal Organs of Generation in situ.* — *Examination of internal Organs of Generation in situ.*

505. *Uterus:* — absence? — malformations. — General appearance and rough estimate of size of urerus;—position of the fundus and of the cervix — Uterus— size. position.

(aiding the determination of this and other points by the introduction of a finger into vagina);—organ straight or bent upon itself, in what way? organ generally occupying its proper position in the pelvis, or lying diagonally, or turned forwards or backwards (noting its exact position)? high or low in pelvis? pressing on perineum, rectum, or bladder, or descended towards vaginal outlet, and to what extent?—adhesions (605).—If enlarged, note general form and character of enlargement, amount of pelvis occupied, and its relation to the pelvic parietes and neighboring organs.

Fallopian tubes—position.

506. *Fallopian tubes:*—their absolute position and direction;—their position and direction relatively to the uterus, ovaries, pelvic tumors, etc.;—

size, etc.

their general characters of size, color, etc.;—adhesions (605).

Ovaries—position. size, etc.

507. *Ovaries:*—their position;—general estimate of their size; if enlarged, general character of the enlargement; hard, soft, uniform, or irregular?—adhesions (605).

Pelvic tumor.

508. *Pelvic tumor* (631 *et seq.*):—its relation to walls of pelvis, uterus, Fallopian tubes, broad ligaments, ovaries, bladder, rectum, etc.

*Uterus (after removal).*

*Uterus (after removal).*

Orifice—size, shape, etc.

509. *Orifice:*—size; shape, natural, oval, rounded, irregular, etc.;—open; obstructed, nature of obstructing substance;—discharge lying within it, its characters;—tumor occupying it, its characters (631).

Lips—size. shape. color. abrasion.

510. *Lips:*—size, equal or unequal?—form, flat, uneven, everted, lobulated (size and characters of lobulation);—color, uniform or not?—abrasion, its

exact situation and extent, depth;—ulcerations (624), their exact situation;—granular-looking patches; their exact situation, size, form, color, elevated or depressed? epithelium on surface present or absent? tumors (631 *et seq.*).

ulcerations, etc.

511. *External characters of uterus generally* (distinguishing, where necessary, cervix and body): —weight;—extreme length, breadth, and thickness; measurements at various points;—form of organ;—characters of surface; color; peritoneal covering smooth, shining, rough, transparent or opake, covered with lymph (603);—tumors, their position, size, etc. (631 *et seq.*);—fissures or ruptures, their seat, extent, depth, direction;—ulcerations (624); wounds (626 *et seq.*); cicatrices (629);—consistence of organ or of parts of it; hard, soft, flabby, boggy, irregular, fluctuating, etc.

External characters generally— weight. measurements. form. surface. tumors. fissures, etc. consistence.

512. *Characters observed on section:—Uterine wall:* thickness at cervix, body, and various parts of these; consistence; color of section;—amount of blood in tissue; condition of bloodvessels as to size, fulness with blood, etc.;—fluids exuding from cut surface on pressure;—abscess (606 *et seq.*);—tumors (631 *et seq.*); their position, nearness to outer or inner surface, their size, characters on section;—condition of subperitoneal bloodvessels and cellular tissue;—microscopical characters of tissue, fatty degeneration, etc.—*Uterine cavity* (distinguishing that of cervix and body): closure of cavity, its cause;—dimensions of cavity;—contents of cavity;—secretions or exudations covering its surface (603); condition of rugæ and glands of cavity;—mucous membrane (594);—condition of submucous tissue (596);—tumors projecting into cavity (631 *et seq.*), their number, position, size,

Characters on section— wall. cavity. contents. secretions, etc. rugæ and glands. mucous membrane. submucous tissue. tumors.

characters externally and on section; character of surface; continuous or not with disease in the wall? —size and condition of *internal orifice* of uterus; —cancerous growths (638 *et seq.*).—*Ovum:* its size, degree of development, etc.

os internum.
ovum.

*Fallopian Tubes.*

*Fallopian Tubes.*

513. Absence?—malformations;—length; direction, apparent cause of alterations in length and direction;—calibre, dilated, contracted; canal obliterated;—color; contents; thickness of walls;—condition of mucous membrane (595); secretions, etc. on surface (594);—condition of fimbriated extremity;—cysts (634 *et seq.*); tumors (631 *et seq.*); tubercle (644); cancer (638 *et seq.*).

calibre.
color.
contents.
mucous membrane, etc.

*Ovaries.*

*Ovaries.*

External characters—size, color.
surface.
cysts.
consistence.
sheath.

514. *External characters:* — absence? — size; color, generally and partially;—condition of surface, smooth, rough, irregular, lobulated; marked by cicatrices (629); fissured, etc.;—cysts beneath surface, or projecting from it (634 *et seq.*);—consistence of ovaries, soft, boggy, fluctuating, firm, hard, irregular, etc.—*Condition of sheath:* its color, thickness, consistence, etc.

Characters of section—aspect.
color.
stroma.
cicatrices.
cysts.
tumors, etc.

515. *Characters of section:* — general appearance, uniform or varied, and in what manner? color;—state of stroma, its consistence, etc.;—fluid exuding on pressure;—section of cicatrices;—cysts, their position, number, size, contents (634 *et seq.*);—tumors (631 *et seq.*), their situation, number, size, general characters;—abscesses (606 *et seq.*);—collections of blood; tubercle (644);

cancer (638 *et seq.*), etc.—Condition of tissues in neighborhood of diseased ovaries.

*Mammæ.* — *Mammæ.*

516. *External characters:*—number, size, position of supernumerary glands;—silvery lines on integument, or other visible marks of previous enlargement.—*Nipple;* its color; size; flattened or drawn in? excoriations; ulcers (624), etc.—*Areola;* its size, color, etc.—*Substance* of gland to feel, soft, knotty, etc., hard.

External characters—silvery lines. nipple. areola. substance.

517. *Section of gland:*—color of cut surface; fluids exuding on section or on pressure;—consistence of gland;—abscesses (606 *et seq.*); cysts (634 *et seq.*); tumors (631 *et seq.*); tubercle (644); cancer (638 *et seq.*).

Section—color. fluids exuding. consistence, etc.

## 2. MALE. — 2. MALE.

518. *Inguinal canal;*—its contents;—hernia; its size; parts forming it, their condition.

Inguinal canal—hernia.

519. *Testicles:* — absent? — malformations of them;—their exact position, in scrotum or abdomen? degree of descent:—size; consistence to the feel;—condition of fibrous coat;—character of section, color, consistence;—abscess (606); cysts (634 *et seq.*); tumors (631 *et seq.*); tubercle (644); cancer (638 *et seq.*).

Testicles—descent. size. consistence. section.

520. *Vasa deferentia:* — thickness; contents; condition of mucous membrane (594).

Vasa deferentia.

521. *Spermatic cord:*—condition; cancer (638 *et seq.*), etc.

Spermatic cord.

522. *Tunica vaginalis:*—malformations;—adhesions;—contents of sac (597);—condition of serous membrane (598), etc.

Tunica vaginalis.

Vesiculæ seminales.

523. *Vesiculæ seminales:*—absence?—malformations;—calibre; dilated; contracted; obliterated;—thickness of parietes;—contents; their color, consistence, etc.;—condition of mucous membrane (595); secretion covering its surface (594);—tubercle (644); abscess (606); cancer (638), etc.;—condition of adjacent tissues.

Prostate gland. size. surface. section.

524. *Prostate gland:*—size; consistence; partial enlargement of middle or lateral lobes? impediment offered by it to passage of urine;—surface of enlarged gland;—color of section; fluid exuding on section or pressure, its abundance, color, etc.;—abscess (606);—tumors (631); tubercle (644); cancer (638 *et seq.*)—Contents of ducts; calculi, their size and chemical characters.

Penis— urethra.

525. *Penis:*—size; malformations; ulcers (624); tumors (631 *et seq.*)— Urethra (498 *et seq.*).

§ II. K.

## K.—ENCEPHALON, AND ITS COVERINGS AND APPENDAGES.

External examination.

526. *External examination of integument and cranium* (355 *et seq.*, 262).—"In newly-born infants, "note presence or absence of customary tumor on scalp."

Scalp— thickness. section. adhesion. collections of fluid, etc.

527. *Scalp:*—thickness of integument and aponeurosis;—amount of blood effused on section;—color of section;—degree of adhesion to surface of cranium;—"extravasation of blood; its relation to contusion-marks externally;" collections of fluid, its characters;—cysts (634 *et seq.*); tumors (631 *et seq.*), etc.; connection of any of the above with apertures in the cranium.—"Wounds (626 *et seq.*)."

528. *Cranium.—Exposed surface:* its color;—smoothness or roughness; seats of roughness or irregularity; degree of roughness, its extent, cause; condition of calvaria opposite diseased appearances on scalp.—"Fractures; their position relatively to marks of injury observed on scalp; with or without "depression?"—*Removal of calvaria:*—adhesions to dura mater; their situation, and where most numerous and strongest?—force required to detach calvaria; can it be detached at all, or is it necessary to remove any part of dura mater with it?—*Inner surface of calvaria:* its form, symmetrical or not?—elevations or depressions; their seat, extent degree, and symmetry;—smoothness of vitreous table; roughness; its degree, position, corresponding to diseased appearance externally, or to adhesions of dura mater?—vascular grooves, their depth; bloody points on surface; color of surface; characters of surface in lines of sutures.—*Ossification of calvaria,* its degree; state of fontanelles.—*Thickness* of cranial bones; abnormal thinning or thickening; their exact seat, measurement, extent, etc.; symmetry of thickness; which table is most concerned in the thickening?—width of *diploe:* fulness of diploic veins; color of diploe; fluids contained within diploic structure, pus, etc.; condition of *frontal sinuses,* of their mucous membrane (594 *et seq.*).—*Openings in calvaria;* their position, size;—parts passing through them;—condition of edges of opening, and their relation to parts passing through.—*Condition of base of cranium* (noted after removal of brain and membranes): depressions and elevations; their degree, symmetry, etc. (particulars as *Inner surface of calvaria,* supra);—condition of foramina and of bone in their immedi-

Cranium—surface.

fractures.

removal of calvaria.

inner surface of calvaria.

ossification.

thickness.

diploe.

frontal sinuses.

openings.

base of cranium.

ate vicinity;—condition of petrous portions of temporal bones, apertures leading to internal ear, fluids contained within them, etc.

Dura mater—color.

529. *Dura mater:*—characters of surface; color generally or partially, white, yellow, red, etc.;—

bloody points.

bloody points on surface, their abundance and principal situation;—

hemorrhage.

hemorrhage on surface (between it and calvaria), its situation; condition of blood, fluid or coagulated? amount; extent over surface; condition of parts about blood, of bone (fissures, necrosis, etc.); condition of vessels in vicinity of

pus.

effused blood;—pus between dura mater and calvaria; its situation, amount, extent, boundaries, etc.

thickness.

(606);—thickness of dura mater, separating readi-

vascularity.

ly into layers; transparency or opacity?—vascularity, order of vessels filled with blood, and their

tumors.

situation;—sloughs (618 *et seq.*);—tumors (631 *et seq.*); their relation to depressions on inner surface of calvaria or other diseased appearance;—

falx cerebri and tentorium.

wounds (626 *et seq.*)—*Falx cerebri* and *tentorium:* depth; presence or absence of reticulation? (other particulars as dura mater generally.)—Inner surface of dura mater. (See *Arachnoid Membrane*, 531.)

Arteries at base of brain.

530. *Arteries at base of brain* (468 *et seq.*).

Arachnoid membrane—contents.

531. *Arachnoid membrane:*—contents of cavity; serosity (601);—fluid blood; its situation, quantity, color;—

coagulum.

coagulated blood; situation, form, size, color and consistence of coagulum; state of its surface; is coagulum adherent or not to arachnoid? presence or absence of a serous membrane on surface of coagulum? presence or absence of epithelium on the serous membrane? vascularity of coagulum, vessels capable of injection from those of membranes or not? characters of section, condi-

tion of the interior as compared with the exterior of the coagulum, as to consistence, color, and microscopical characters; hydatids in cavity of arachnoid.—Adhesions between the two layers of arachnoid (605).—Surface of arachnoid (noting separately that of convexity and base of brain, that covering each portion of encephalon, and that covering dura mater (598); granulations (tubercles) on membrane (644); their capability of removal, etc.; left on pia mater on stripping off the arachnoid.—Transparency of arachnoid, generally between the convolutions, in vicinity of longitudinal fissures;—special seats and extent of opacity.—Color of membrane generally or in parts;—its vascularity noted with that of pia mater;—its consistence noted with that of pia mater; its thickness.

adhesions.
surface.
transparency.
color, etc.

532. *Subarachnoid serosity:*—its quantity;—position, occupying intergyral spaces? raising arachnoid from surface of convolutions (to what extent?); limited to certain spots?—its color, etc. (601).

Subarachnoid serosity.

533. *Pia mater* (noting exact locality of all abnormal appearances, and distinguishing the membrane covering each portion of the encephalon): amount of contained serosity, its color, transparency, etc. (601);—lymph, its situation, extent, color, consistence, opacity, etc. (603);—granulations (tubercles); their number, position, form, size, etc. (644);—cancerous matter (638 *et seq.*);—vascularity of membrane as seen through arachnoid, degree of fulness of larger vessels between and upon convolutions of smaller vessels; air in vessels, its abundance; degree of fulness of vessels situated in folds which dip between convolutions; degree of fulness of vessels which dip into gray

Pia mater—
serosity.
lymph.
granulations, etc.
vascularity.



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matter (observed when detaching pia mater from surface of convolutions); relative degree of fulness of vessels of membrane covering anterior and posterior lobes;—fluid blood, its situation, quantity, etc.;—coagulated blood, situation, form, size, color, and consistence of coagulum; coagulum laminated or not? adherent or not to parts adjacent? condition of large vessels near clot;—transparency of pia mater;—thickness;—consistence; size of portions of arachnoid and pia mater removable by the forceps from the convolutions without tearing;—adhesions of pia mater, number and size of portions of convolutions detached with pia mater when that membrane is removed by forceps.

blood.

transparency.

thickness.

consistence.

adhesions.

Sinuses.

534. *Sinuses of dura matter:*—their fulness etc. (See *Veins*, 474 *et seq.*)

*Brain.*

## *Brain.*

Generalities: weight, etc.

535. *Generalities:*—weight generally, and that of cerebrum, pons Varolii, medulla oblongata, and cerebellum separately;—specific gravity of various parts.—Rapidity with which substance softens on exposure or by handling.

*a. Cerebrum.*

### *a Cerebrum.*

Points observed before removing membrane.

536. *Points to be observed before removal of arachnoid and pia mater* (as much as possible being noted while brain is *in situ*):—degree of development; size; form; symmetry of two sides;—space between surface of brain and calvaria.

Parts at base.

537. *Parts at base of brain.—Crura cerebri; locus niger; optic tract; optic commissure; corpora albicantia; tuber cinereum; infundibulum; pituitary*

*body*, etc.—In respect of each of the above, note their size, symmetry, color on surface, consistence, appearance on surface, appearance on section, etc. (as 541); extravasation of blood (542), etc.—Attached portions of *cerebral nerves*, their condition (585 *et seq.*); condition of membranes about them. — cerebral nerves.

538. *Removal of arachnoid and pia mater:*—tenacity with which pia mater adheres to surface of cerebrum; apparently increased or not? its cause (softness of convolutions, absence of normal amount of serosity, increased number and consistence of vessels passing from pia mater into convolutions). — Removal of arachnoid.

539. *Convolutions externally:*—"fully developed or not?" breadth;—breadth of intergyral spaces; —flattening, local or general;—local bulging; local depression;—smoothness of convolutions; polish; granular appearance; worm-eaten appearance.—Color of convoluted surface; yellow patches; crimson spots;—situation and extent of discolored parts; number of convolutions involved.—Consistence of convolutions; amount removed in detaching membranes; gravitative flattening of surface of brain locally; consistence to the touch; effect of a stream of water (no breach of continuity previously existing);—relative consistence of convolutions of anterior and posterior lobe, or of any parts discolored or otherwise changed.—Ulcers (624); relation between meninges, and the edges and floor of the ulcer; condition of brain-substance around and beneath ulcer, its consistence, color, vascularity, etc., extent to which it is altered.—Sloughs (618 *et seq.*); relation to meninges; tenacity with which slough adheres to adjacent brain-substance; condition of brain-substance around.—Deposits; tumors (631); wounds (626); puckerings, etc.

Convolutions externally—size. flattening, etc. — color. — consistence. — ulcers. — sloughs, etc.

Section of convolutions—gray matter.

microscopical characters.

White substance—consistence.

color.

blood in vessels.

corpus callosum.

microscopical characters.

Extravasation of blood—situation, etc.

coagulum.

540. *Section of convolutions:*—breadth of gray matter of convolutions; hue; consistence; specific gravity; vascularity.—Condition of gray matter subjacent to abnormal portions observed on surface.—Microscopical characters, of tissue, of minute vessels.

541. *White substance of hemispheres:*—moisture of cut surface; consistence of the substance, diminished, soft, pulpy, creamy; diffluent; consistence increased;—extent of substance altered in consistence;—adhesion of cerebral substance to the knife; sense of resistance local or general, offered to the knife; its apparent cause (calcification of vessels, etc.);—specific gravity; color of cut surface, dead white, cream-colored, green, rose, orange;—fluids expressible.—Blood in vessels; number and size of red points; number and length of red lines (these facts to be noted in reference to the anterior and posterior lobes, and to corresponding parts of the two hemispheres.)—*Corpus callosum* (particulars as above).—Microscopical characters, of tissue, of minute vessels (especially of parts altered in color or consistence).

542. *Extravasation of blood:*—its exact situation;—if the layer of blood be thin, note whether it lies in the plane of the cerebral fibres, or across them (i. e., whether or not it has necessarily ruptured the cerebral fibres);—fluid blood, its amount, color, and consistence;—coagulated blood;—coagulum; its measurements; color, at centre, at circumference, uniform or laminated? shade of red, shade of orange; degree of attachment to walls of cavity in which it lies; its mode of attachment, by vessels, by fibrin, etc.—Walls of cavity in which

blood lies (543).—Microscopical characters of coagulum, of tissue, of wall, of cavity.

543. *Cavities in cerebral substance:*—their number; measurements; capacity; shape.—Contents; blood (542);—purulent-looking fluid (602), its quantity, color (especially reddish, orange, yellow, or greenish); its consistence, at centre, at circumference;—serosity (601);—fluid like milk of lime, its quantity, consistence;—microscopical characters.—Bands crossing cavity; cellular, or consisting of vessels? their consistence;—adhesions between opposite walls of cavity; readily separable or incapable of separation? — Inner surface of cavity; consistence;—smooth; polished; lined or not by a serous membrane? ragged; characters of flocculi, their color, consistence, structure (consisting of cerebral substance, of vessels);—color of inner surface, especially shades of yellow, green, orange, or red.—Condition of cerebral substance around cavity; consistence diminished, soft, pulpy, creamy, diffluent; consistence increased;—color, especially shades of yellow, green, orange, or red;—vascularity;—studded with points of extravasated blood; — puckering towards any part of cavity;—linear cicatrix extending from any part of cavity (544).

Cavities—measurements, etc. contents. bands. adhesions. inner surface. surrounding substance.

544. *Cicatrices in cerebral substance* (630):—radiated; linear;—their situation, size, color, transparency, consistence, etc.;—condition of cerebral substance around (541), consistence, puckering, etc.

Cicatrices.

545. *Wounds of cerebral substance* (626).

Wounds.

546. *Adventitious products;* calcareous masses, their size, consistence, microscopical characters, etc.; tumors (631 *et seq.*); tubercle (644); cancer

Adventitious products.

(638 *et seq.*)—Condition of cerebral substance around each of the above (540, 541).

Minute vessels.

547. *Minute vessels of brain:*—coats thickened, calcareous, etc.;—their microscopical characters.—Note their condition, especially in and around softened and indurated parts, and around extravasation of blood.

Lateral ventricles—contents.

548. *Lateral ventricles* (noting any differences in the two ventricles):—contents; fluid, its quantity, "odor," color, transparency, etc. (601);—solid; lymph (603), coagulated blood (542), hydatids, etc.—*Choroid plexus:* pale, œdematous; loaded with blood;—cysts, their situation, size, structure, etc. (634 *et seq.*);—calcareous bodies, their situation, size, consistence, microscopical characters, etc. —*Velum interpositum:* its transparency, consistence; vessels empty or filled with blood?—*Foramen of Munro:* degree of patency.—*Lining membrane* of ventricles; its integrity; dryness or moisture? degree of polish;—roughness, from minute pits over surface, from granulations, from vesicles;—abnormally vascular; number, size, and situation of vessels:—consistence tough, offering resistance to knife; thickness; transparency;—apertures visible leading to extravasations of blood (542), or collections of puriform matter (607); cicatrices (629), their situation, size, color, form, transparency, consistence, puckering of membrane around, etc. (Note exact situation of any morbid appearance, especially in relation to corpora striata or thalami optici.)

choroid plexus.

velum interpositum.

foramen of Munro.

lining membrane.

Septum lucidum.

549. *Septum lucidum:*—present or not?—apertures, their situation, size, form; state of lining membrane, at edge of aperture;—consistence; facility with which torn;—color;—œdema;—extra-

vasation of blood into substance (542).—Condition of *fifth ventricle;* size; contents; condition of its lining membrane. — fifth ventricle.

550. *Fornix* (distinguishing the condition of anterior and of posterior pillars, of intermediate portion, and of part included between posterior pillars): —consistence; color: œdema;—vascularity; extravasation of blood (542). — Fornix.

551. *Third ventricle:*—contents; capacity;—extravasation of blood (542).—*Commissures,* their consistence, vascularity, etc.; soft commissure absent? double?—*Lining Membrane,* its integrity (especially to be noted where soft commissure appears absent);—consistence, etc., of surface of optic thalami in ventricle. — Third ventricle—contents. commissures. lining membrane.

552. *Optic thalami and corpora striata:*—size; symmetry; condition of surface (as seen in ventricles, 548, 551).—Section (particulars as 541); if softened, extent of softened substance; extravasation of blood (542), etc. — Optic thalami and corpora striata—section.

553. *Condition of parts on upper surface of pons Varolii.—Pineal gland and its peduncles; corpora quadrigemina; processus a cerebello ad testes; valves of Vieussens; corpora geniculata;* noting in respect of each, external appearances, color, consistence, and characters of section; extravasations of blood, etc. — Upper surface of pons Varolii—pineal gland, etc.

### *b. Pons Varolii.*

*b. Pons Varolii.*

554. *External characters;*—color of surface; consistence, etc.;—condition about superficial origin of nerves. — External characters.

555. *Appearance on section,* specifying exact situation of morbid changes (particulars as 541); —extravasation of blood (542), etc. — Section.

*c. Medulla Oblongata.*

*c. Medulla Oblongata.*

External characters.

556. *External characters:*—size; shape; symmetry; color;—degree of adhesion of membranes;—consistence of surface (noting exact locality and extent of abnormal appearances).—Condition about superficial origin of nerves.

Fourth ventricle.

557. *Fourth ventricle:*—its contents;—extravasation of blood(542);—condition of floor of ventricle; its color, vascularity, consistence, etc.

Section.

558. *Section of medulla oblongata* (noting the several portions of it which are the seat of any morbid change, and its extent); color; vascularity; consistence;—extravasation of blood, etc.

*d. Cerebellum.*

*d. Cerebellum.*

External characters.

559. *External characters:*—size; form; symmetry;—general firmness or consistence;—adhesion of membranes;—consistence of surface; color of surface (noting exact locality of morbid change in this or any other respect);—local fulness; local depression.

Section.

560. *Section of Cerebellum* (noting the exact locality and extent of any morbid change);—color; vascularity; consistence;—extravasation of blood (542); cavities (543); cicatrices (544); wounds (626 *et seq.*); condition of minute vessels (547); tumors (631 *et seq.*); tubercle (644); cancer (638 *et seq.*), etc.

Peduncles.

561. *Peduncles of Cerebellum:*—their color, consistence, etc.

## L.—SPINAL CORD, ITS COVERINGS AND APPENDAGES. § II. L.

562. *Integuments over spine* (455 *et seq.*).—Tumors; their exact seat; form; size; shape; consistence;—effect of pressure on them. Integuments over spine—tumors.

563. *Vertebræ* (to be examined both behind and anteriorly, in the neck, in the chest, and in the abdomen).—Condition of bodies, arches, spinous processes, etc. (370).—Angular projections or curvatures of spine; condition of vertebræ, etc., giving rise to them.—Fissures (spina bifida); their seat; extent;—size of prominence;—tissues forming the tumor observed externally;—quality of contained fluid. Vertebræ.

564. *Intervertebral substance* (372). Intervertebral substance.

565. *Vertebral canal.*—Peculiarities of form or size; proportional width to mass of cord;—fluid contained within it; its amount and characters;—fat contained in it; its amount, exact seat.—*Spinal veins;* their size, fulness, etc. (474 *et seq.*). Vertebral canal—spinal veins.

566. *Theca vertebralis:*—filled out or not? bulged in any particular part? (other particulars as 529.) Theca vertebralis.

567. *Spinal arachnoid membrane* (particulars as 531). Spinal arachnoid.

568. *Cerebro-spinal fluid:*—amount; where accumulated? movable or not along cord?—color, etc. (601). Cerebro-spinal fluid.

569. *Ligamentum denticulatum:*—color, consistence, etc. Ligamentum denticulatum.

570. *Pia mater:*—thickness; firmness; vascularity; attachment to cord (further particulars as 533). Pia mater.

*Spinal Cord.*

### *Spinal Cord.*

External characters—weight. size.

571. *External characters:*—weight; size, generally or locally (noting exact seat and extent of enlarged or diminished parts);—cervical and lumbar enlargements, obvious or not? in what degree?—

fissures, etc.

its consistence generally;—fissures, anterior, posterior, and lateral; their condition; color and consistence of surface about them, and of the several columns of the cord.

Section.

572. *Section of Cord:*—(distinguishing the exact seat and extent of any morbid changes, and whether involving the gray or white matter only; or both)—(particulars as 541).—Distinctness of gray substance; its tint, etc.

Roots of nerves.

573. *Roots of nerves:*—especially with regard to size of foramina, or pressure upon any of them. —(Other particulars as 585 *et seq.*)

Cauda equina.

574. *Cauda equina.*

§ II. M.

## M.—ORGANS OF THE SENSES.

*Organs of Touch.*

### *Organs of Touch.*

Integument—nerves.

575. *Integument:*—its condition (355 *et seq.*). —*Nerves;* their condition (585 *et seq.*).

*Organs of Smell.*

### *Organs of Smell.*

Nares—nerves.

576. *Nares:*—their condition (433 *et seq.*).—*Olfactory nerves* (537, 585 *et seq.*).

### *Organs of Taste.*

*Organs of Taste.*

577. *Tongue and Fauces:*—their condition (380, 384).—*Nerves* supplying tongue and fauces (glosso-pharyngeal, gustatory, and other branches of the fifth); their condition (585 *et seq.*).

Tongue and fauces—nerves.

### *Organ of Vision and its Appendages.*

*Organ of Vision and its Appendages.*

578. *Eyelids:*—"open or closed? adherent?" œdema, etc.

Eyelids.

579. *Eyeball:*—prominent; depressed;—eye dull; bright; glistening;—cornea full or flaccid?—arcus senilis present or not? its width, microscopic characters, etc.;—lymph on iris (603);—size of pupil, medium contracted, dilated;—"presence or absence of membrana pupillaris?"—Contents of eyeball; condition of several humors.—Retina; its condition.—Optic nerve; its size, consistence, etc. (537, 585).

Eyeball.

### *Organ of Hearing and its Appendages.*

*Organ of Hearing and its Appendages.*

580. *External ear:*—its condition.

External ear.

581. *External meatus:*—its diameter; contents;—condition of lining membrane, polypi, etc.—*Tympanic membrane:* its thickness, color, form, opacity;—perforation, its size, situation, etc.

External meatus. tympanic membrane.

582. *Internal ear* (distinguishing the several parts which are the seat of morbid alteration):—mucous membrane of tympanum and mastoid cells (594 *et seq.*); contents of tympanum and mastoid cells;—condition of Eustachian tube; its permeability; condition of mucous membrane (594 *et seq.*).

Internal ear.

Osseous structures.

583. *Osseous structures* (370).—Connection of morbid alterations with disease of brain or its membranes (K. p. 110).

Auditory nerve.

584. *Auditory nerve :*—its condition (537, 585).

§ II. N.

## N.—NERVES.

(Cerebro-spinal and Sympathetic—noting the nerve and its branch or the ganglion which is the seat of abnormal appearances.)

*Nerve.*

### *Nerve.*

External characters.

585. *External characters :*—size, actually and comparatively with that of opposite side of body; form; flattening; color; consistence; tumors upon it (631 *et seq.*);—condition of tissue around altered part of nerve; tumors in the neighborhood of and pressing upon nerve, alterations in course of nerve from this or other causes.—Wounds (626): apparent union after wound; appearance of united part; —character of ends of divided nerve, noting size, etc. of each portion.

Neurilemma.

586. *Neurilemma :*—color; vascularity; thickness; consistence; opacity; fluids infiltrating;—condition of funicular sheaths.

Nerve tissue.

587. *Nerve tissue*;—color; consistence; fluids expressible;—tumors (631 *et seq*); their connection with nerve-fibres. — Anatomical characters and arrangement of nerve-fibres and neurilemma at extremities of divided nerve, or at point of union of a previously divided nerve.—Microscopical characters of nerve-substance and neurilemma of any abnormal portion.

*Ganglion.* — *Ganglion.*

588. *External characters:*—size; general consistence; color; condition of tissues about it. — External characters.

589. *Sheath of ganglion:*—color; vascularity; opacity; thickness; consistence; fluids infiltrating it. — Sheath.

590. *Section of ganglion:*—color; vascularity; consistence; dryness or moisture; fluids expressible. —Microscopical characters;—condition of nerve tubes passing through ganglion. — Section.

## O.—VASCULAR GLANDS. — § II. O.

591. *Thymus gland:*—present or absent?—its position; height to which it extends; relation to surrounding parts;—size; weight; form; color externally: general consistence;—condition of tissues about it.—Cellular investment; its color; vascularity; thickness; consistence, etc.—Section of gland; color of cut surface; its general aspect; vascularity; consistence; fluids exuding or expressible; suppuration; microscopical characters. — Thymus gland—presence. size, etc. — cellular sheath. section.

592. *Thyroid gland:*—size; if enlarged, special seat of enlargement, direction in which it has extended;—form; weight; color externally; general consistence;—condition of surrounding parts, displacement, etc.—Cellular investment; its color, vascularity, thickness, consistence, etc.—Section of gland; color of cut surface; vascularity; matter exuding on pressure;—extravasation of blood, surrounded or not by a cyst; condition of blood; —cysts, their size, number, contents (fluid, solid, or gelatinous matters, blood, etc.); microscopical — Thyroid gland—size, etc. — cellular sheath. section.

characters, of any of the above;—other abnormal growths or deposits, fibrous, calcareous, etc.

Suprarenal capsules—size, etc. cellular sheath. section.

593. *Suprarenal capsules:*—their size; weight; position; form; color externally.—Cellular investment; its color, vascularity, thickness, consistence, etc.—*Section of body;* condition of cortical substance, its diameter, color, vascularity, consistence; fluids exuding or expressible;—central substance, its size, color, consistence, etc.;—extravasation of blood; suppuration; abnormal growths and deposits, cancer, tubercle, etc.

# APPENDIX.

*Mucous Membrane.*

*Mucous Membrane.*

594. *Secretions and exudations on surface.*—*Mucus*: quantity generally or at particular spots; color; consistence; degree of adhesion to membrane; "foreign matters mixed with it, their characters."—*Lymph* (603).—*Blood:* fluid or coagulated? quantity; distribution; color; odor; mixed or not with secretions? etc.—its source of blood discoverable (lens used or not)?

Secretions, etc., on surface—
mucus.
lymph.
blood.

595. *Condition of membrane.*—*Color;* noting whether color observed is general, partial, or in patches or streaks; defined or gradually shading off? mottled;—white, pallid, livid, red .(600), yellow, green, gray, black, slate-colored;—uniform sooty discoloration, its situation—black, charred aspect;—staining, uniformly or dotted with yellow spots;—dyeing, from what apparent cause?—*Transparency:*—*Hemorrhagic spots;* their situation; color; definition; depth to which they extend; effect of a stream of water upon them.—*Surface:* dry or moist (noting length of time exposed to air)?—smooth; glistening; dull; rough; mammillated, situation and degree of mammillation; puckered, situation, size, shape, and color of puckered spots;—condition of papillæ; condition of follicles;—eruption; vesicles; pustular eleva-

Condition of membrane.
color.
transparency.
hemorrhagic spots.
surface.

epithelium. consistence. thickness. ulcers. sloughs, etc. diverticula.

tions, their contents and characters.—*Epithelium:* detached, entirely or partially? no trace of it remaining.—*Consistence:* length of strips obtainable from different parts (regulated by consistence of membrane or degree of adhesion between mucous and submucous coats?); seat of altered consistence (the most dependent part, etc.); membrane removable by washing, by a stream of water, etc.;—color, thickness, transparency, and appearance of the vessels at any softened part;—are edges of softened portion well defined?—*Thickness:* at different parts; relative thickness of normal, softened, and indurated parts.—*Ulcers* (624).—*Sloughs* (618 *et seq.*); situation; extent; color; depth; consistence, etc.;—color, etc., of surrounding tissue.—Perforations (625); fistulæ (618 *et seq.*)—Wounds (626 *et seq.*)—*Cicatrices* (629).—*Tumors;* polypi, formed of local hypertrophy of mucous membrane, of fatty growth, of fibrous tissue, of vascular tissue, etc. (631 *et seq.*)—*Diverticula:* number; situation; size; shape;—condition of mucous membrane forming them;—their contents.

Submucous tissue— color. ecchymosis. thickness. consistence. infiltration, etc. tumors, etc.

596. *Submucous tissue:*—color;—ecchymosis; its situation and extent; color of blood; elevation or not of mucous membrane over its seat?—thickness; consistence;—degree of laxity or firmness; infiltration with serum, pus, etc.; emphysema.—Tumors beneath mucous membrane; tubercular-looking matter (644); cancerous-looking matter (638 *et seq.*), etc.

*Serous Membrane.*

## *Serous Membrane.*

Contents— gas.

597. *Contents.*—*Gas:* quantity (how estimated?); position, occupying cavity generally or

limited to a particular locality?—apparent source; odor; chemical characters;—color of surrounding textures.—*Liquid matters:* quantity; apparent source;—position, occupying cavity generally, or limited to a particular part? how circumscribed? —odor; color; transparent or opake? consistence, thick, gelatinous, thin, etc.; serous (601); purulent-looking (602);—special characters; mixed with bile, fecal matter, etc.—coagulable or not, on removal from body?—containing solid particles; amount and character of deposit after standing;—microscopical characters.—*Solid matters:* characters; their apparent source; — cysts (634); — foreign bodies, loose or circumscribed;—gall-stones; phleboliths; worms, etc.—*Blood:* amount; position; color mixed or not with other matters? coagulated or not?—apparent source.

liquid matters.

solid matters.

blood.

598. *Condition of membrane—Adhesions* (605): general or partial? parts between which adhesion is observed.—*False membranes:* lymph or other exudations (603.)—*Color:* ash, gray, red (600), edges of redness defined, or shading off into color of surrounding part, etc.;—vascularity;—size of vessels.—*Ecchymoses.*—*Surface:* moist; sticky; dry; —smooth; rough, physical characters of inequalities producing roughness;—polished or not? glistening, bright, pearly; dull;—puckered; situation and extent of puckering; condition of subjacent tissue. — *Substance:* — transparent or opake?— thickness; if increased, extent of thickening; appearance of thickened part on section;—consistence;—opake white patches; their size and shape; are there corresponding patches on opposed serous surface?—semi-cartilaginous patches;—ossific deposit; its thickness; size; consistence; friability;

Condition of membrane: adhesions.

false membranes, etc.

color.

ecchymoses.

surface.

substance.

denuded of serous membrane at any part, or covered by it at all parts?—tubercles or tuberculous-looking matter (644); — cancerous-looking matter (638 *et seq.*)—Ulcers (624); sloughs (618 *et seq.*); ruptures, situation, extent; perforations (625); fistulæ (613 *et seq.*); wounds (626); cysts (634); cicatrices (629).—*Malformations;* their character;—absence of membrane; over what extent? apparent cause of absence; condition of edges of membrane where absence commences.

ulcers, sloughs, etc.

malformations.

Subserous tissue— color. consistence. thickness. infiltration, etc.

599. *Subserous tissue:*—color; consistence, degree of laxity or firmness;—thickness;—infiltration with serum, pus, etc.;—containing blood, extent, character, color, etc. of effusion; apparent source of blood; extent to which it elevates membrane; — emphysema. — Tumors beneath serous membrane (631 *et seq.*);—tubercular-looking matter (644); cancerous-looking matter (638 *et seq.*); cysts (634 *et seq.*), ossific matter, etc.

tumors, etc.

*Redness.*

*Redness.*

Situation— extent.

600. *Situation* of redness, especially with reference to the position of the subject.—*Extent* of redness; edge defined, or gradually shading off into color of surrounding parts?—*Hue:* bright red, scarlet, dusky red, violet, brownish red, verging to gray;—if there be two tints, note their relative situation and amount.—*Form:* uniform, from staining, from juxtaposition of capillaries; punctiform, punctæ formed by minute extravasations of blood, by peculiar arrangement of injected vessels; capillary; ramiform (large or small?)—Degree of *fulness of veins* leading from the red part to be traced back towards the heart.—Effect of gravitation on

hue.

form.

fulness of veins.

effect of gravitation.

the redness; effect of washing.—Note condition of blood generally as to fluidity. — effect of washing.

*Serosity.* — *Serosity.*

601. Amount; odor; color; transparency; specific gravity;—chemical characters, reaction, presence and quantity of albumen, presence of urea, etc.; its microscopical characters (645 *et seq.*). — color, etc. — chemical characters. — microscopical characters.

*Purulent-looking Fluid.* — *Purulent-looking Fluid.*

602. Quantity; odor; color; consistence; effects of liquor potassæ on its consistence; specific gravity; reaction.—Presence of curdy or flaky-looking matter; of clots of blood; of sloughy-looking particles.—After standing, deposition of a sediment; amount of sediment; its color, consistence; —supernatant fluid; its color, transparency, reaction.—Microscopical characters (645 *et seq.*). — color, etc. — deposit. — microscopical characters.

*Lymph and other Exudations.* — *Lymph and other Exudations.*

603. *Amount* and thickness;—*color* generally; color of free surface, of attached surface.—*Form:* an even layer; villous-looking, length of villi; granular, size of granules.—*Distribution:* uniformly over the surface; limited to particular spots (*e. g.*, on the peritoneum, to the angles formed by adjacent convolutions of intestines); in patches.—*Adhesion to membrane* on which it is seated; firmness of adhesion;—condition of membrane after removal of lymph; its color, polish, consistence, etc. — color. — form. — distribution. — adhesion. — membrane beneath.

604. *Substance of lymph or exudation:*—its condition; elasticity;—amount of serosity expressi- — substance.

microscopical characters.

ble from it; alterations in physical characters, produced by expression of the serosity.—Microscopical characters (645 *et seq.*).

*Adhesions.*

*Adhesions.*

situation, etc. color, etc.

605. Parts between which they are observed.—Number; situation; form; extent; length; breadth; thickness; color; transparency; consistence; elasticity; vascularity; arrangement of the vessels;—

new products in adhesion.

infiltration with serum.—New products in their substance, tubercle, cretaceous matter, etc.—Correspondence of adhesions with morbid changes in adherent parts or organs.

*Abscess.*

*Abscess.*

Diffused.

606. *Diffused:*[1]—the exact parts and extent occupied by it; the condition of the parts in contact with the pus, as to color, consistence, etc.; characters of pus (602).

Circumscribed—form.

607. *Circumscribed:**—by cyst, condensed cellular tissue, integuments, fascia, etc.;—form, ovoid, pyramidal, flat, &c.;—prominence, its degree;—

surface.

color of surface; red (bright, or dull), bluish, purple; uniform or more intense at certain points? circumscribed or diffused?—if under integuments, shining appearance of surface, cracking or separation of cuticle;—any appearance of pus being seen

palpation.

*through* the thinned walls?—Palpation; sensation conveyed to fingers;—soft, semi-elastic, boggy, elastic, tense;—fluctuation, its degree and extent;

[1] In living subject, note also heat of surface, pain, tenderness, etc.

—do parietes feel thin or the reverse? do they feel thinner at one part than another?

608. *Opening:*—natural or artificial; exact position and direction, with regard to abscess itself (at upper part, centre, most depending part, etc.) and to the surrounding parts;—length; breadth; —valvular or not?—*Edges of opening:* smooth; uneven; inverted; overhanging the cavity; fixed and adherent or loose? indurated or the reverse?—thickness; color.

Opening— edges.

609. *Walls:* —thickness; consistence; of what tissues composed?—internal appearance of walls; their color;—smooth; irregular; flocculent; granular;—*granulations:* size, prominence; firm or flabby? color; vascularity; covered with pellicle of lymph, pus, etc.

Walls. granulations.

610. *Contents:*—(602.)

Contents.

611. *Cicatrix:*—partially or entirely formed? (629 *et seq.*)

Cicatrix.

612. *Condition of parts surrounding the abscess:* color; consistence; swelling; puckering, etc.

Surrounding parts.

*Fistulæ.*

*Fistulæ.*

613. *Orifices* (on surface of skin, etc.):—one or more?—size; shape;—condition of edges as regards smoothness, hardness, color, etc.;—whether raised into a papilla or depressed?

Orifices.

614. *Fistulous passage or canal:*—direction, straight, tortuous, oblique, etc. (ascertained by probe or dissection? if by a probe, its size, etc.); —exact relation to surrounding parts;—length; diameter at different parts of its course;—sinuses in its walls.—*Termination:* in *cul-de-sac;* in a cavity; an abscess; opening into some other part

Fistulous passage— direction. length, etc. termination.

internal orifices.

or viscus.—*Internal orifices:* one or more?—their character, size (613);—if in *rectum*, the distance of orifice of fistula from anus; precise position of opening (determined by finger introduced into rectum or by dissection?)

Lining membrane.

615. *Lining membrane:*—its character; color; vascularity, smoothness, hardness, etc.

Discharge.

616. *Discharge:*—color, consistence, odor; puriform (602); aqueous (601), etc.;—mixed or not with other substances, as feces, bile, blood, etc.?—occurring spontaneously or only on pressure? does pressure cause discharge when applied to any neighboring part?

Surrounding tissues.

617. *Surrounding tissues:* — color, swelling; firmness; — infiltration with pus, serum, urine, etc.;—abscess, slough, or gangrene. —If fistula opens on surface of body, is skin near the orifice firmly adherent to subjacent tissue or partially separated from it?

*Mortification, etc.*

*Mortification—Gangrene—Sphacelus.*

External characters—color.

618. *External characters:*—color of the part affected; yellowish, ash-colored, livid, purple, greenish, brown, or black; intensity of color; mottled or uniform;—extent of surface, etc., affected;—color well defined, diffused, shading off into natural color of surrounding textures.—Tumefied or not? flaccid, soft, or hard? shrunk or not?—Hygrometric condition; moister or drier than natural? feeling greasy.—Skin tense or loose?—Cuticle detached or not? shrivelled or not?—Fluid effused under cuticle (601); generally, or in bullæ? bullæ numerous or solitary? their size and prominence;—fluid movable or not, by pressure,

swelling, etc.

dryness or moisture.

state of cuticle.

fluid under cuticle.

from one part of the gangrenous surface to another? —Crepitation on pressure.—Odor, faint, fœtid, garlic-like.—Temperature.*—Pulsation of arteries in part affected.* crepitation. odor. temperature. arterial pulsation.

619. *Line of demarcation* from healthy texture; breadth of line; color, intensity of redness; small vesicles or not on line of demarcation? width and depth of fissure or chink, if any; etc. Line of demarcation.

620. *Dissection:*—depth to which discoloration, etc., extend; affecting skin, cellular tissues, muscles, tendons, bone;—in viscera, is the morbid state limited to surface, single lobules, lobes, etc., or diffused? Dissection.

621. *Motility and sensibility:*[1] — Power of moving the part retained by patient.—Pain, tenderness, numbness, pricking or stinging sensation; sensation of heat or cold. Motility and sensibility.

622. *Marks of injury* or of prior applications to the part; redness from pressure;—other sores present or not?—infiltration of parts with urine, etc. Marks of injury.

623. *Surrounding parts;*—œdema, etc.; condition of arteries (468 *et seq.*) and veins (474 *et seq.*) leading to and from the part. Surrounding parts.

*Ulcers.* *Ulcers.*

624. Number; situation; form; superficial extent; depth.—*Edges:* level with surrounding tissue, bevelled, raised, everted, inverted, ragged; smooth; —their thickness;—their consistence;—color, red, slate-colored, etc.—*Floor,* its color; vascularity;—consistence;—covered with a scab; characters of the scab, its degree of adhesion to floor and to edges of ulcer, its consistence, thickness, color, and micro- form, etc. edges. floor.

[1] To be noted in living subject.

scopical characters;—covered by fluid; degree of adhesion of fluid, its color, tenacity, and microscopical elements;—tissue constituting floor of ulcer;—floor smooth, polished, ragged;—covered with

granulations. *granulations*, their size, color, consistence, bleeding or not on manipulation?—open mouths of vessels apparent on floor, artery or vein.

*Perforations.* *Perforations.*

situation. 625. Number;—situation, anteriorly, posteri-

form, etc. orly or at most dependent part of organ?—shape, circular, oval, slitlike; effect of moderate stretching on shape;—size (*in situ* and when moderately stretched);—closed or not by contact with adjoining structures, partially or entirely?—edges smooth,

edges. ragged, irregular, flocculent; perpendicular, as if punched out, bevelled; consistence, hard, soft, pulpy; color, pale, grayish, red, etc.; dotted or streaked with sooty points or lines;—mucous coat or subjacent tissues (*e. g.* peritoneum) most extensively destroyed?—direction taken by perforation,

direction. adjacent parts. direct, oblique, etc.;—alterations (softening, etc.) in parts adjacent or subjacent to perforation, their

cause. extent;—apparent cause of openings on membrane; their connection with abscesses, aneurism, softened cancerous matter, etc.

*Wounds.* *Wounds.*

Before dissection—seat, etc. 626. "*Facts ascertainable before dissection;*[1]—Number;—seat (noting not only the tissue or or-

[1] These are points which, in *medico-legal inquiries*, are to be noted during life, as well as in the examination of a dead body.

gan, but also the particular part of the structure injured);—extent; length; breadth;—shape, *e. g.* irregular, triangular, rounded, oval, valvular (in which direction?);—measurements before manipulation; depth as estimated by the eye;—direction with reference to the structure or organ in which it is seated, transverse, longitudinal oblique.—*Edges of wound;* foreign matters; adhering to them; hair, weeds, iron rust, blood, scabs;—blackened by powder;—position of edges, in apposition, gaping;—tissue constituting them (if apparent);—form; cleanly cut, lacerated, jagged; contused; swollen; everted; inverted; moist or dry? gangrenous;—color; pallid, vivid red, purple, black.—Examine *angles* of wound, to determine direction in which a wound was made, from right to left, from above downwards, or from below upwards.—*Contents of wound:* foreign matters derived from without, *e. g.*, bullets, portions of clothing, earthy particles, etc.;—blood; its consistence, degree of adhesion; purulent-looking fluid, etc.—*Condition of parts adjacent* to wound; their form, swollen, puckered;—consistence, boggy, indurated;—color, mottled, purple, yellow, green, etc."

form.

measurements. direction.

edges.

angles.

contents.

parts adjacent.

627. "*Facts ascertainable by dissection.*—Depth of the wound; are skin or deep parts most injured? which extremity of wound (if incised) is the deeper?—its direction below surface of wound.—*Parts divided:* relation to each other of the various structures divided, e. g., muscles, cellular tissue, fasciæ, etc.—Relative position of the divided parts of structures, e. g., divided extremities of muscles and vessels more widely separated than the cut surfaces of other structures.—*Adhesions, e. g.*, divided parts united so firmly as to be indistinguish-

On dissection: depth, etc.

parts divided.

adhesions.

able or inseparable the one from the other;—other degrees of adhesion.—*Foreign matters*, e. g., purulent fluid or blood between the various structures; their amount and extent.—*Tissues adjacent to wound;* their color, consistence, etc.—containing serosity, lymph, puriform matter.—Extravasation of blood; its extent;—consistence of the blood;—blood collected in a mass; infiltrated into tissues; particular tissues into which it is infiltrated, and their consistence."

foreign matters.

tissues adjacent.

Examination of weapon.

628. "*If a weapon be discovered,* compare it with wound, its sharpness with character of edges of wound (626);—were all wounds found on body apparently inflicted with the same instrument?—Foreign bodies found adhering to weapons; blood (determined chemically and microscopically); hair, does it agree in character with hair in neighborhood of wound, or with hair of wounded person?—Weapon found in hand of individual; in which? how held, and with what firmness?—is any blood on hand grasping it or not?—found at a distance, how far and on which side of body?—is weapon injured (examine its edge)?—Mode in which blood is diffused over a weapon (in a thin layer generally on edge only, in drops); are blood-stains nearest to point or handle?"

*Cicatrices.*

*Cicatrices.*

On surface of structures—form, etc.

color, etc.

629. *On the surface of structures:*—their number;—form, linear, oval, irregular, radiated;—definition;—measurements;—depressed, depth of depression; smooth; puckered;—movable or not over subjacent tissue;—color, compared with adjacent tissue; vascularity;—epithelium present or

not?—is any hair growing upon it?—*Surrounding tissue:* smooth; of glistening appearance; puckered;—its consistence, color, vascularity, etc.

surrounding tissue.

630. *In the substance of organs:*—their number;—definition;—measurements;—continuous or not with the surface of the organ?—color, vascularity.—Parenchyma, between the cicatrix and surface, and around the cicatrix; its condition.—Depression on the surface corresponding to cicatrix; its characters.—Cavities in its substance, their size, walls, contents;—cretaceous matter imbedded in cicatrix, its abundance, situation, consistence, adhesion.—Relations of cicatrix to the trunks of tubes and vessels permeating the organ.

In substance of organs—definition, etc. color. parenchyma about it. surface corresponding. cavities, etc. relations to vessels, etc.

*Tumors.*

*Tumors.*

631. Number; size; position;—relation to surrounding organs; connection with surrounding organs, sessile, pedunculated, adherent (605).—Weight.

Number, size, etc.

632. *Superficial characters:*—surface uniform; polished; rough, physical cause of roughness; granulated, size of granules; nodulated, size of nodules; furrowed, extent and depth of furrows;—color generally; color of particular parts, e. g., of furrows, nodules, etc.; transparency;—bloodvessels on surface, their size and fulness.—Elasticity, flaccidity, fragility.—Apertures leading to the interior; their size, number, situation; condition of their edges; substances expressible from them.

Superficial characters: smoothness, etc. granulation, etc. color. elasticity, etc. apertures.

633. *Characters on section or fracture:*—odor;—consistence; flaccidity, fragility, elasticity;—specific gravity of portions of tumor.—*Fractured* surface; smooth; granular; fibrous.—*Cut* surface;

Characters on section—consistence. fractured surface. cut surface.

smooth; granular; fibrous, arrangement of fibres; loculated, number, size, situation, and contents of loculi.—Substances expressible; substances removable by scraping;—their consistence, color, transparency, and microscopical character.—Color of section; transparency.—Bloodvessels; their size; arrangement; relative proportion of arteries, veins, and capillaries; their origin; mode of termination. —Microscopical characters.—(If different parts of a tumor vary in consistence, color, or transparency, the above facts should be noted with reference to each part of the mass.)

substances expressible.
color.
vessels.
microscopical characters.

*Cysts.*

*Cysts.*

Number, size, etc.

634. Number; situation; size; form;—relative position in regard of each other; connection with each other and with adjacent parts;—relation of cysts to the bloodvessels and ducts of the organ in which they are seated.

Walls.

635. *Walls of cyst:*—their thickness; consistence; transparency; color; vascularity;—epithelium apparent or not on inner surface?—microscopical characters.

Contents—

636. *Contents of cyst:*—fluid, its quality;—solid matter, its size;—odor; consistence; transparency; color; vascularity; fracture; mode of attachment to the walls;—proportion soluble in ether;—microscopical characters; chemical characters.—*Hair in cyst:* its quantity; length; consistence; color;—free; aggregated in masses, their number, size form, cut surface;—attached to wall of cyst; part to which hair is attached; its mode of attachment; character of the wall at the point of attachment.—*Teeth in cyst:* their number;

hair.

teeth.

characters;—free;—attached to walls of cyst, mode of attachment;—attached to bone, mode of attachment, characters of the bone.—*Bones in cyst:* their number; size; form; — mode of attachment to cyst, to each other;—microscopical characters. bones.

637. *Secondary cysts:*—their number; size; form;—connection to containing cyst; relation of contained cysts to each other;—walls and contents (particulars as above). Secondary cysts.

*Cancer or cancerous-looking Matter.* *Cancer, etc.*

638. *External characters:*—size; shape; form; —precise situation in relation to affected tissues; —mode of connection with tissues; infiltration at edges of tumor with cancer or ordinary exudation matter (determined by microscope, 645 *et seq.*);—capable of being enucleated;—surrounded by a cyst (true or pseudo-cyst?); does it send processes inwards into cancerous mass? — Surface; even, knotty, tuberous, granulated, etc.;—color; odor;—consistence, resembling that of any tissue or known object? elasticity:—are consistence and elasticity equal in all parts? External characters—shape. connection with tissues. cyst. surface. consistence. color, etc.

639. *Characters on section:*—General resemblance to any known object;—color; consistence; —color and consistence uniform or not?—lobulated aspect of masses or not?—Arrangement, locular or not? characters of loculi, their size, shape, general uniformity (or the contrary), degree of distinctness; —general comparison of locular and intralocular substances;—fineness or coarseness of locular texture;—intralocular separable or not from locular substance? with what ease?—Vascularity; its de- Characters on section— loculi. vascularity.

gree, color, closeness, uniformity;—connection with surrounding vessels apparent or not?—results of injection; veins, arteries.—Matters observed on section different from cancer; melanic matter, pus, tubercle, fat, pseudo-tissues, etc.

other matters.

Characters on fracture.

640. *Characters on fracture:*—is fracture permitted? its degree of sharpness.

Effects of pressure.

641. *Effects of pressure:*—on form and consistence of matter;—fluids expressible; by what degree of force? quantity; characters to naked eye, to microscope (645 *et seq.*).

Chemical characters.

642. *Chemical characters:*—Effects of boiling.

Microscopical characters.

643. *Microscopical characters* (645 *et seq.*):—nuclei; proportion to perfect cells, their form; proportion of size of nucleus to cell (estimated by the eye or by the micrometer);—evidence of changes in cells, diffluence, fatty change, thickening, desiccation.

*Tubercles, etc.*

*Tubercle, or tubercular-like Bodies.*

Situation, size, etc. color.

644. Situation; number; relative position;—size; form, spherical, pyriform—color, yellow, gray, white (if of more than one color, note relative position of the two); transparency or opacity.—Consistence; generally, of centre, of circumference; presenting cavity in centre? fluids expressible;—character of cut surface.—Vascularity; relation of vessels to the tubercular-like matter, to adjacent tissues.—Microscopical characters (645 *et seq.*).—Condition of tissue surrounding tubercle as to color, thickness, consistence, etc.—Situated on a membrane; is it capable of removal without injury to membrane? appearance of surface after its removal;—inseparably united with membrane.

consistence, etc.

vascularity.

microscopical characters.

surrounding tissues.

capability of removal.

*Microscopical Characters.*

*Microscopical Characters.*

645. *Granules:*—number; size; color;—aggregation, size and other characters of aggregation.—*Effect of reagents,* water, acetic acid, hydrochloric acid, ether, and liquor potassæ;—granules unaffected by them; dissolved without effervescence; dissolved with escape of gas; rendered more distinct; rendered indistinct.

Granules—number, size, etc. effect of reagents.

646. *Fibres:*—their definition; size; arrangement, parallel or interlacing? form, straight, wavy, curled; color;—presence of nuclei; their number, size, form, definition.—*Effect of reagents,* water, acetic acid, hydrochloric acid, ether;—fibres unaffected; dissolved; rendered more distinct; rendered indistinct; caused to swell up;—effect of the same reagents on the nuclei; nuclei unaffected; rendered more distinct; rendered less distinct; nuclei not previously seen brought into view.

Fibres—definition. size, etc. nuclei. effect of reagents.

647. *Cells:*—their definition; size; form; elasticity; consistence; color.—*Cell wall;* transparent; granular; hyaline; plicated.—*Contents* of cell; granules, their number, size, color, and molecular movement.—*Nucleus:* number of nuclei; shape; size; definition;—if several, their situation with reference to each other and to the cell-wall.—*Nucleolus;* number of nucleoli; size; form; character of outline; color.—*Effect of reagents,* water, acetic acid, ether, liquid potassæ, solution of iodine, on cell-wall, granular contents and nucleus separately; unaffected; enlarged; contracted; rendered more transparent; rendered less transparent; dissolved; rendered more distinct; rendered less distinct.

Cells—definition. size, etc. consistence. cell-wall. contents. nucleus. nucleolus. effect of reagents.

Crystalline or amorphous saline bodies.

648. *Crystalline or amorphous saline bodies:*—their precise characters; effects of reagents upon them.

THE END.

# THE LONDON MEDICAL SOCIETY OF OBSERVATION.

## MEMBERS.

### President.

| | Date of Admission. |
|---|---|
| W. H. Walshe, M. D., Professor of the Principles and Practice of Medicine in University College . . . | 1850 |

### Secretary.

| | |
|---|---|
| T. Snow Beck, M. D., F. R. S., Physician to the Farringdon General Dispensary . . . . . | 1850 |

### Ordinary Members.

| | |
|---|---|
| W. Jenner, M. D., Professor of Pathological Anatomy in University College . . . . . | 1850 |
| E. A. Parkes, M. D., Professor of Clinical Medicine in University College . . . . . | 1850 |
| C. J. Hare, M. D., Assistant Physician to University College Hospital . . . . . | 1850 |
| E. H. Sieveking, M. D., Assistant Physician to St. Mary's Hospital . . . . . | 1850 |
| S. W. J. Merriman, M. D., Physician to the Royal Infirmary for Children . . . . . | 1850 |
| R. H. Semple, M. D., Physician to the Islington Parochial Infirmary . . . . . | 1850 |
| A. P. Stewart, M. D., Assistant Physician to Middlesex Hospital . . . . . | 1850 |

| | Date of Admission. |
|---|---|
| F. Sibson, M. D., F. R. S., Physician to St. Mary's Hospital | 1850 |
| A. B. Garrod, M. E., Professor of Materia Medica in University College | 1850 |
| W. H. O. Sankey, M. D., Resident Medical Officer to the London Fever Hospital | 1851 |
| E. Ballard, M. D., Physician to the Farringdon General Dispensary | 1851 |
| S. Morris, Esq., Clinical Assistant at the Consumption Hospital | 1851 |
| H. Weber, M. D., Resident Physician to the German Hospital | 1851 |
| Handfield Jones, M. D., F. R. S., Assistant Physician to St. Mary's Hospital | 1852 |
| G. Johnson, M. D., Assistant Physician to King's College Hospital | 1852 |
| Lionel Beale, M. B. | 1852 |
| H. Briggs, Esq., Demonstrator of Anatomy in University College | 1852 |

### Corresponding Members.

| | |
|---|---|
| W. Beneke, M. D., late Resident Physician to the German Hospital | 1850 |
| W. T. Gairdner, M. D., Pathologist to the Royal Infirmary, Edinburgh | 1850 |
| R. Neale, M. B., Fazeley | 1850 |
| T. E. Leudet, M. D., late Vice-President of the Medical Society of Observation, Paris | 1851 |
| J. Russell Reynolds, M. B., Leeds | 1851 |

# LAWS.

I.

Objects.

THE objects of the Society are to promote the advancement of accurate Pathology and Therapeutics, by clinical and allied investigations, the value of which shall be estimated by the numerical method; and to exhibit the special advantages which may accrue to the science of medicine, by the co-operation of several persons working on a uniform plan towards the elucidation of given medical questions.

II.

Constitution.

The Society shall consist of a president, secretary, ordinary and corresponding members.

The number of ordinary members shall be limited to twenty-five.

Candidates for admission into the Society shall be proposed by two members, and balloted for at the first subsequent meeting. One black ball in five to exclude the candidate.

III.

Means.

The Society shall pursue its objects by the following means:—

(1.) By the collection of records of cases observed by the members, the particulars in every instance (whether observed at the bedside or after death), to be noted in writing at the moment of

observation—fulness of detail to be constantly held in view as deeply important, but accuracy alone to be considered absolutely necessary.

(2.) By the accumulation of observations of special phenomena of disease, and the relations subsisting between them, with the view of ascertaining their regulating laws—it being understood that the subject and the plan of observation shall, in each instance, be sanctioned by the Society.

It shall be competent for the Society to request the particular attention of members to certain special classes of disease.

Any member proposing a subject for investigation, shall submit it, and the plan of observation, to the Society; and should they be adopted, the proposer shall furnish each member with a copy of the plan drawn out in a tabular form.

In order to facilitate their arrangement and analysis, the Society can accept from its members the records of such cases only, as shall have been legibly written out on the right-hand side of Bath post paper, and the particulars of which have been arranged in the order, or according to the form, adopted by the Society.

Each ordinary member shall be expected to read the records of two cases, and to give ten answers to questions for the special phenomena of disease during the period of each year; and in the event of any member failing to read one case, and to give five answers to questions, he shall cease to be a member of the Society—unless some satisfactory reason for his failure be assigned.

The records of cases, etc., shall be kept in the custody of the Secretary, to be put to any use the Society may determine.

IV.

Rules of publication.

The Society shall, as often as may be deemed fit, publish the results of its labors, under the title of "Transactions of the London Medical Society of Observation."

The Transactions to consist of:—

(1.) Analyses of the records of cases (and, when deemed desirable, the cases themselves), from the collection in the possession of the Society.

(2.) Analyses of the observations of special phenomena of disease.

(3.) Analytical papers by ordinary or corresponding members, founded on observations and inquiries, conducted in accordance with the principles recognized by the Society.

The Society shall be responsible for the analyses, the individual observers for the accuracy of the facts. The analyses of the collections of records of cases, and of special observations, shall be made by one or more members, to be appointed for that purpose by the Society.

The names of the contributors of the records of cases, etc., and of their analyzers, shall be severally prefixed to any paper published in the Transactions.

The Society shall appoint a Committee to report upon the papers prepared for publication; but it shall rest with the Society to order their insertion in the Transactions.

V.

Meetings.

The Society shall meet on the first and third Wednesdays of each month, at eight P. M., and adjourn at ten o'clock, unless the President shall consider it desirable to prolong the meeting.

The place of meeting to be at the houses of the ordinary members, in rotation.

Each member may introduce one visitor to the ordinary meetings of the Society.

VI.

Ordinary business.

The ordinary business of the Society shall consist of:—

(1.) The reading aloud of the observations upon special phenomena of disease.

(2.) The reading aloud of the records of a case or cases.

(3.) It shall be competent for each member (or visitor) to address to the author of these cases, &c., queries, having for their object the elucidation of facts obscurely or insufficiently described—it being understood that all questions are put with the direct sanction of the President.

Discussions on general subjects shall be avoided, and may be repressed by the President.

VII.

Alteration of the laws.

All resolutions affecting the laws of the Society, shall be proposed at one meeting, and considered at the first subsequent meeting of the Society.

No alteration of, nor addition to the laws shall be made, except at a special meeting convened for the purpose.

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